Title of Report:	**Sub Regional Wider Economic Outlook into the Agrifood Sector**
Committee Report Submitted To:	The Leisure & Development Committee
Date of Meeting:	21 June 2022
For Decision or For Information	For Information

Linkage to Council Strategy (2021-2025)	
Strategic Theme	Local Economy
Outcome	Council contributes to improving levels of business innovation in the Borough
Lead Officer	Interim Head of Prosperity and Place

Budgetary Considerations	
Cost of Proposal	n/a
Included in Current Year Estimates	**YES/NO n/a**
Capital/Revenue	
Code	
Staffing Costs	

Screening Requirements	Required for new or revised Policies, Plans, Strategies or Service Delivery Proposals.		
Section 75 Screening	Screening Completed:	Yes/No	Date: n/a
	EQIA Required and Completed:	Yes/No	Date: n/a
Rural Needs Assessment (RNA)	Screening Completed	Yes/No	Date: n/a
	RNA Required and Completed:	Yes/No	Date: n/a
Data Protection Impact Assessment (DPIA)	Screening Completed:	Yes/No	Date: n/a
	DPIA Required and Completed:	Yes/No	Date: n/a

1.0 Purpose of Report

The purpose of this report is to present to members the report on the sub regional wider economic outlook into the agrifood sector, which details the specific context for Causeway Coast and Glens Borough Council area.

2.0 Background

Armagh City, Banbridge & Craigavon Borough Council in partnership with Causeway Coast & Glens Borough Council, Fermanagh & Omagh District Council and Mid Ulster District Council in January 2022 directed a tender to undertake research at a sub-regional level into the wider economic outlook of the agri-food sector, to identify possible economic interventions to aid economic recovery and inclusive regional balanced growth. This action arose as part of an 11 councils' discussion on the Economic Recovery Action Plan. The report was funded through the Economic Recovery Sub Regional Grant and led by Armagh City Banbridge & Craigavon Borough Council.

Agri-Food specialists Birnie Consultancy were appointed to undertake the work and the full report is provided at **Annex A.**

The report will provide evidence for council going forward in relation to the agrifood sector which was identified as a sector to sustain and grow within the Recovery & Renewal Economic Strategy for the Causeway Coast and Glens, pg. 53 CCAGBC - Economic_Development_Strategy_2020_to_2035.pdf (causewaycoastandglens.gov.uk)

3.0 Report Highlights

The Sub Regional Report considered underpinning strategies and policies and researched the current agrifood sector across the 4 councils relevant to the key AgriFood Challenges, the economic value of AgriFood, Business interactions, current trends and existing support.

Analysis of the Causeway Coast and Glens area notes that 50% of registered food businesses are from farmers and growers. The food businesses also have an excellent hygiene rating with 1209 businesses receiving a 5* rating.

The total economic output relative to Agri food detailed below shows that Agricultural production equates to 12.8% of the total economic value for the region and Agrifood production 25.7%

	Total Economic Value of Region	Total Value of Agricultural Production	% of Total Economic Value	Total Value of Agri-Food Production	% of Total Economic Value
Causeway Coast and Glens	£1.9 billion[1]	£244m	12.8%	£488 million	25.7%

9 recommendations for future actions based on the feedback from stakeholders, examples of best practice have been detailed within the report by Birnie Consultancy and are listed below:

1. Create comprehensive, effective communication and record keeping within each council region.

2. Ensure Joined up working between the council, Invest NI and other connected organisations.

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[1] A snapshot of the local economy in Causeway Coast & Glens: COVID-19 and after

3. Create a programme which supports all food businesses to collect and use data and to implement automation.

4. Create an aesthetically appealing environment for business.

5. Create space and services to accelerate food business growth.

6. Intentionally focus on the delivery of culture change in agriculture and agri-food business.

7. Provide advice and support to enable businesses to improve and market sustainability.

8. Create events and networks which promote local food production and attract visitors.

9. Engage with the Assembly on the delivery of the 10X Agri-Tech Cluster.

Each of these recommendations have accompanying actions to consider [see pages 85-87 of the report in **Annex A**].

Council officers will use this document to plan for future activity within Prosperity & Place to sustain and grow the Agrifood sector as part of the Recovery and Renewal Economic Strategy for Causeway Coast and Glens.

Annex A

SUB REGIONAL WIDER ECONOMIC OUTLOOK INTO THE AGRI-FOOD SECTOR

BIRNIECONSULTANCY
STRATEGIC DEVELOPMENT IN AGRI-FOOD

Contents

INTRODUCTION & CONTEXT

"Provision of a summary of the wider N.I. industry context and challenges"

Context

Armagh City Banbridge & Craigavon Borough Council in partnership with Fermanagh & Omagh District Council, Mid Ulster District Council and Causeway Coast & Glens Borough Council in January 2022 directed a tender undertake research at a sub-regional level into the wider economic outlook of the agri-food sector, to identify possible economic interventions to aid economic recovery and inclusive regional balanced growth.

To this end, after a selection process, Agri-Food specialists Birnie Consultancy were appointed to undertake the work.

About Birnie Consultancy

Birnie Consultancy is a solutions-driven consultancy working with farmers, primary and secondary food processors, supermarkets, levy bodies, advisory organisations, charities, non-profits, research institutions and governments across the UK and Europe.

We design and manage commercial and research projects, write and implement strategies, deliver in-depth technical analysis and reports, manage farmer groups, deliver knowledge exchange, manage funding applications as well as deliver expertise around the presentation and communication of information. Our approach to working with our clients is solutions focused and highly consultative – we pride ourselves on working closely with our clients. Our agri-food experts drive growth and transformation by enabling and driving excellence in organisations.

We bring our expertise and industry knowledge to organisations across the whole food chain, nationally and internationally, to drive business performance and operational improvements while helping our clients build on their capabilities, productivity, profitability and skills, enabling them to access different markets, boost their competitiveness and add customer value while building on delivering sustainability.

We have a broad spectrum of contacts across the industry including large scale industry groups and projects such as Food Futures, ARC Zero, Nature-Friendly Farming Network, AHDB, QMS, Queen's University Belfast, Invest NI, Department of Agriculture, Environment and Rural Affairs etc. We are highly experienced at delivering high-quality projects in tight timescales with high levels of customer satisfaction. We have recently delivered the Independent Strategic Review of the Northern Ireland Agri-Food Network and Armagh, Banbridge & Craigavon Borough Council's Agriculture Strategy, which will be published this year and put us at the forefront of Northern Ireland's Agri-Food Sector.

The Agri-Food Landscape

Our food sector is under pressure. A wide range of factors has combined to create a set of circumstances where it is difficult to successfully operate a food business. There is the need for increased production to supply increased demand which is contrasted with the need to reduce the impact of agriculture on the environment.

Customers are demanding ever higher standards of production but in most cases are not willing to pay more due to prevailing economic conditions. The upcoming changes to agricultural support payments and the absence of capital support payments for larger food processing businesses are significant pressures and will potentially lead to business closure (in the case of farms) and business relocation to more favourable areas (in the case of food processing businesses).

The development of the food sector is challenging and complex. Multiple businesses and support organisations are intertwined with many components involved in the delivery of improvements. Isolating the effect of one specific change can be difficult. Business continuity and/or growth is dependent on economic sustainability and, to a lesser extent, environmental sustainability. There is no silver bullet for the improvement of either of these factors and multiple complementary actions are required to make a positive difference. Ultimately effective action is dependent on the production of sound data and analysis on which decisions can be based.

A positive business culture is critical, and Northern Ireland lags behind many countries in this regard, often taking low-risk, low-tech solutions when something more radical is required. Many businesses also display fierce independence

when a collaborative approach may be better for all. This is often grounded in a lack of understanding of available benefits and information must be made available to counteract this.

The practical nature of business owners is well-known and widespread application of solutions demands that practical examples of the efficacy of proposed solutions are available, along with any required support to deliver and maintain change. Case studies are essential within this.

Our approach to this work has been heavily based on the gathering and effective analysis of appropriate data, and the identification of good practice which has been shown to work elsewhere. The accurate analysis also requires a strong understanding of human and business behaviour, and any solutions must take the practical application into consideration.

Underpinning strategies and policies

1.1.1 Kendall Report

The Kendall report was intended to identify key pathways to improvement for the Northern Ireland agri-food sector. The report studied agricultural production, as well as upstream food manufacturing. 11 recommendations were made by the report.

1) **Embrace the smart use of data and the opportunities it creates.** The Kendall report identified the absence of data collection, analysis and use for management as the key driver of change up and down the supply chain.

2) **Create a Northern Ireland Diamond to deliver green growth.** The Northern Ireland diamond was described as a framework for effective engagement between the industry, government, science and civil society. It is intended to facilitate joint target setting and work towards key goals, allowing the Northern Ireland food industry to become world leading for integrity, environmental assurance, quality and customer service. The report highlighted the fact that Northern Ireland has a closely connected food network, strong institutions and the ability to lead the world in many areas if the industry can harness its connectedness.

3) **Demonstrate the sector's sustainability through a new Sustainability Body**. The report recommended the creation of a cross sectoral sustainability body, where each sector would carry out joint development work, as well as individual sector work to address jointly set targets.

4) **Be ambitious on Net Zero.** The report emphasised the urgency of the industry setting ambitious targets for itself and demonstrating decisive action to the consumer. The need for businesses to measure sustainability performance, set targets and demonstrate improvement is important.

5) **Aim high on your environmental scorecard.** A range of initiatives were suggested under this recommendation, aimed at creating joint working up and down the supply chain to meet the required targets. Part of this recommendation was centred on key messaging and culture change across the supply chain.

6) **Boost investment by large food businesses.** The need for capital support for large food businesses was identified by the report. It was noted that that Northern Ireland lags behind England, Scotland, Wales and Ireland in terms of support for large processors and that, consequently NI large food businesses are operating at a disadvantage. The report recommended that capital grant should be released for large processors but that it should be linked to investment in methods of raising sustainability.

7) **Focus on trading arrangements, beyond GB.** The need for stability around trading relationships is seen as critical for agri-food businesses, and this was emphasised to government.

8) **Tackle skills and labour supply.** The report engaged with many businesses throughout Northern Ireland, up and down the supply chain. What was clear was that many businesses are currently dependent on a ready supply of labour, and there is currently a severe threat to this supply. Businesses identified the need to automate, but emphasised that, in many cases, automation is too difficult to achieve with the variable nature of the product that is being processed.

9) **Innovate!** The importance of creating a culture of innovation was discussed, to cause an uplift in true innovation across the food industry. The report recommended that DAERA encourage forward thinking research to open up new markets and enable new processes.

10) **Entice entrepreneurship and talent.** The need for entrepreneurs was highlighted within the industry, and this recommendation focused on the need for the industry to work together to encourage talent into the industry, to encourage risk-taking and to take the industry forward. Scientific and commercial innovation is seen as key within this.

11) **Design an agricultural policy that drives change.** The report highlighted the need for an ambitious, forward looking agriculture programme which drives highly efficient, environmentally sustainable production, and enables Northern Ireland to be a key supply choice for the world's highest paying food markets.

1.1.2 NIFDA Automated Food Manufacture Report

The NIFDA report involved ten key businesses within Northern Ireland. The report used a range of techniques including the 4Manufacturing assessment process to understand where each business ranks against a range of business indicators. The report identified several components which were common to most businesses. These components included;

- **Challenges around collection of data to measure business performance**, including automation of data collection, installation of software systems which can communicate effectively, the analysis of the data and regular reporting to management to enable better decision making.
- **Challenges around attracting and retaining labour,** particularly for unskilled repetitive jobs which do not add value to the final product. Almost all businesses expressed concern around obtaining labour and expressed the desire to find methods of automating much of the manual work. The main area most businesses would consider for automation is packaging and storage.
- **Challenges around upskilling staff to meet the needs of a much more technologically advanced production floor.** Many of the businesses identified challenge around upskilling staff to enable management of an advanced production floor. The future of food production is generally recognised to be one where there are fewer people in more highly skilled and better paid roles. Significant training needs are starting to emerge.
- **Implementation of continuous improvement principles.** All businesses in the report were focused on implementing improvement. Not all businesses felt that this approach was shared by all staff, including some at management level. Continuous improvement requires cultural change, and is heavily linked to the data collection and use component.

1.1.3 Green Growth

The Green Growth Strategy is the Northern Ireland Executive's multi-decade strategy which is intended to balance needs around the climate, environment and the economy in Northern Ireland. It sets out the long-term vision and a solid framework for tackling the climate crisis correctly. The strategy contains a number of focus components against which all development must be critiqued. These components include:

- **Respect our planet** - by restoring and protecting our natural capital. Future human wellbeing depends on a healthy and resilient natural world
- **Decarbonise** - replace fossil fuels with renewable energy
- **Reduce our wasteful use of resources** - through greater efficiency and an increasingly diverse and circular economy
- **Re-evaluate, recognise and reward what matters** - create genuine, shared wellbeing by prioritising human development that we and the planet can live with
- **Lead by example** - inspire ambition, innovation and courage for change. Show the way by being honest, open and transparent in measuring our progress
- **Collaborate** - work and learn together to develop solutions that maximise the outcomes we want to see
- **Use all tools available** - balancing and utilising tools such as investing in research and development, de-risking new technology, regulation, legislation, incentives, information and budgets
- **Share responsibility** - we all must act and ensure that there is a just transition to a low carbon, nature rich society
- **Measure progress** - openness and transparency about progress, regularly evolving our actions through continuous learning and improvement based on data and science

1.1.4 10X

The 10X programme is intended to drive a decade of innovation, implementing technological advancements which dramatically change how we live, work and enjoy ourselves. The 10X states that keeping pace with these changes will not deliver change in the real world and that the years ahead require innovation on a new scale – unlocking opportunities to drive growth and inclusion. The strategy states that there are a set of technologies that will shape the future, and Northern Ireland has established real strength in a selection of these technologies. These

technologies can come together to form 'clusters' and this combination generates increased innovation, higher levels of competitiveness and helps businesses diversify into new markets.

Five areas of strength have been identified:

1) **Digital, ICT and Creative Industries (e.g. Cyber Security)**
- The processing and communication of information by electronic means, including transmission and display, and incorporates Cyber Security; AI & Data Analytics; Telecom, Mobile & Data, Networks; Healthcare IT; Smart Cities; and Sports Tech. Digital and Entertainment Media.

2) **Agri-Tech**
- The application of innovation and enabling technologies to build competitive advantage and transition to net zero across the primary and secondary processing sectors, including genomics, traceability of food, advanced packaging, plant and animal health specialisms, and the application of AI to new agricultural methods.

3) **Fintech/ Financial Services**
- Services and technological solutions to the international financial services industry including banks, insurance companies, and asset management companies.

4) **Advanced Manufacturing and Engineering (e.g. Composites)**
- Advanced manufacturing is the use of innovative or cutting edge technologies and methodologies for improved competitiveness in the manufacturing sectors. It embraces companies in Aerospace & Defence, Automotive, Construction, Materials Handling, Electronics, Energy, Water and Consumer Products.

5) **Life and Health Sciences (e.g. Personalised Medicine)**
- Specialisation in Pharmaceutical, Diagnostics, Connected Health, Medical Devices and Biotechnology with a focus on enhancing wellbeing and providing health care solutions.

Relevant to this strategy, Agri-Tech is seen as a key driver, and the application of advanced technology within agriculture and agri-food can enable significant process to be made. It is acknowledged that the application of advanced technology will be critical for farming to be able to achieve it.

With Strategy 10x, DfE is examining the set-up of Agri-tech as the first cluster, and are currently consulting on how this will look in reality. Broadly however, Agri-Tech clusters are collections of businesses and other organisations which set out to work jointly to promote the development, testing and commercialisation of high-tech equipment aimed at delivering higher economic and environmental performance in agri-food. Cluster creators will:

1) Identify a challenge or range of challenges which can be addressed through agri-tech
2) Identify the value of the opportunity
3) Identify all steps required to address the opportunity
4) Identify all organisations which are necessary to enable each step to be delivered
5) Create a forum where the required organisations can interact, set joint targets and establish joint working procedures
6) Enable joint access to expertise and funding sources to drive development

1.1.5 Environmental Scorecard and Management

Agriculture has a significant influence on the health of our environment. The Independent Strategic Review of the Northern Ireland Agri-Food Sector outlined an environmental scorecard which summarises current performance in Northern Ireland:

- 27% of GHG emissions come from agriculture, the majority of those emissions coming from enteric fermentation in cattle.
- 12% of total UK ammonia emissions come from NI, a land area which is 6% of the UK total, and more than 95% of NI's ammonia emissions come from agriculture (88% from livestock, 8% from fertilisers, 4% from sewage sludge and digestate).
- Only 31.3% of river water bodies and 24% of lakes are achieving "good status" required under the Water Framework Directive (WFD).
- Since 2012-13 there has been an increase in the national phosphorous surplus and soluble reactive phosphorous concentrations in rivers, with agriculture contributing 60% of the P load to water bodies.
- 57% of soils are classed as high risk for run-off. 38% have Olsen P concentrations above the optimum for grassland.
- An estimated 86% of NI's peatlands are in a degraded state, with over 95% peat bogs at high risk from excessive nitrogen deposition.

- Only 20% of NI's terrestrial protected areas are under favourable management.
- NI has 119,000 ha of woodland (52% under Forestry Service ownership), 9% of its land versus 13% across the whole of the UK. 283ha of new woodland was created by private landowners in 2020/21.
- 25% of bird species on the island of Ireland are on the red list of conservation concern, with upland and farmland birds accounting for 85% of those species[i].
- 48,000 hectares are under agri-environment schemes as compared with well over 400,000 ha in the years between 2006 - 2012.

These figures highlight the challenges which DAERA, the agri-food sector and other organisations must address over the coming decades.

1. *Climate Change Bill (TBC)*

The climate change bill is intended to focus activity around environmental protection. The bill is still progressing through the assembly and its final form is not yet complete. It is expected that the bill and the requirements which will come from it still have some way to go until the final form is recognised. Amendments to the executive Bill have been proposed, most notably, two amendments to provide some degree of protection for our agriculture sector. The first is to ensure that, in the context of aiming for net zero emissions by 2050, the level of reductions in methane emissions is not required to be more than 46% lower than the baseline year (1990). Importantly, this is consistent with the Integrated Pollution Prevention and Control (IPPC) and Climate Change Committee (CCC) evidence and advice in regards to reducing methane to achieve long term temperature goals in the Paris Agreement. The next amendment is to remove emissions from agricultural sources from the net zero target.

2. *Air Quality regulation*

Air quality in Northern Ireland is covered by UK and EU law. The legislation sets a range of air quality criteria. Air quality requirements set standards around multiple air pollutants. Standards relevant to agriculture and agri-food include Ammonia, Nitrogen Dioxide and Sulphur Dioxide. Government statistics estimate that air pollution in the UK reduces the life expectancy of every person by an average of 7-8 months, with an associated cost of up to £20 billion each year through impact on the health service and on business.

Ammonia (NH_3) is an air pollutant which is primarily emitted from agriculture and it is known to have a damaging impact on biodiversity, ecosystem resilience, sensitive habitats as well as human health. The main agricultural activities which cause Ammonia output include the storage and spreading of manures and/or slurries, as well as the spreading of fertiliser. Ammonia reduction is a key priority for Northern Ireland, and is almost totally the result of agricultural activity.
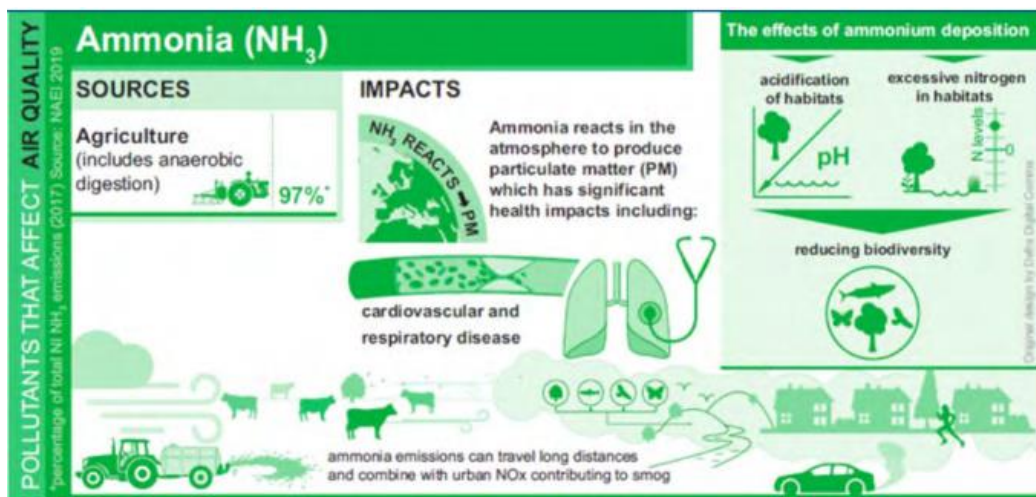
Sulphur Dioxide is predominantly the result of industrial processes rather than agriculture. However, as agri-food processing involves the use of significant amounts of energy, food processors will be required to minimise the output of SO_2.
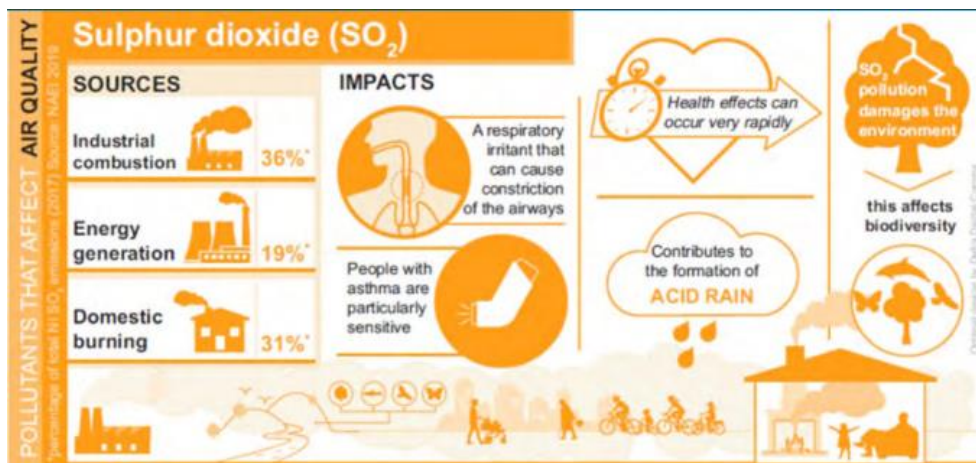
Non-methane volatile organic compounds (NMVOCs) are a set of organic compounds that are typically photochemically reactive in the atmosphere, producing ozone and impacting biodiversity and climate change.
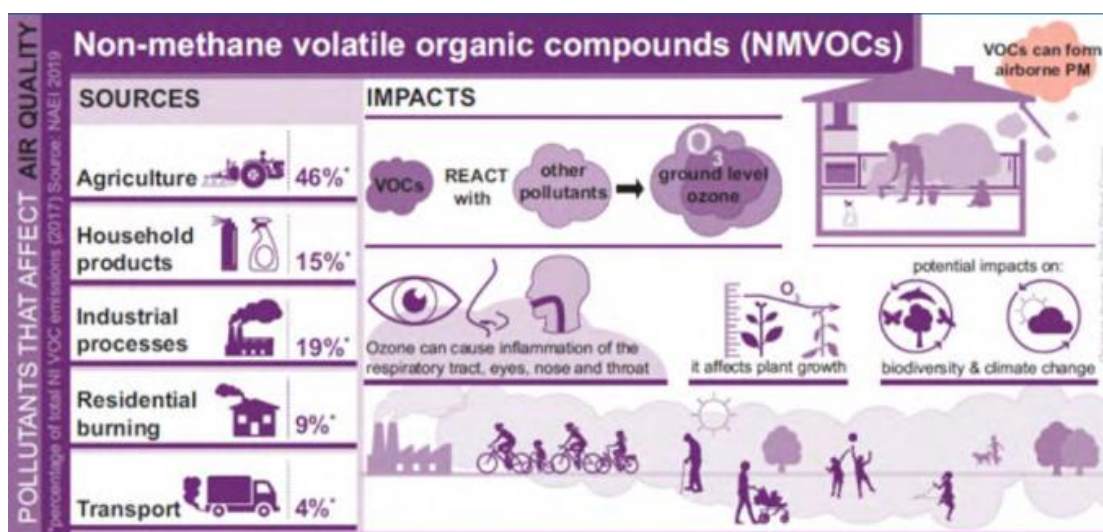
A clean air strategy consultation document was released by DAERA in November 2020 which was intended to gather information around steps to manage and improve air quality. The outcome of this consultation will be legislation and other measures to minimise environmental impact of human activity.

3. Water Quality regulation

Water pollution management in Northern Ireland has been divided into nine areas. Each of the nine areas is staffed by an Environmental Health (Rivers) Officer (EHRO) or Senior Water Quality Inspector (SWQI) and a number of Water Quality Inspectors (WQIs) who act as field agents.

The European Water Framework Directive governs water quality in Northern Ireland. A number of other are also in place, including the Urban Wastewater Directive, the Drinking Water Directive, the Nitrates Directive, the Groundwater Directive and the Priority Substances Directive.

Currently (and as identified in the scorecard at the start of this section (1.1.5), Northern Ireland falls well below the intended standards for water quality. Some of this is due to agriculture, but water treatment plants also have a significant impact.

1.1.6 One Health

'One Health' is an approach to designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes.

Improved human health will become an increasingly important requirement from food and farming. The impact of diet on human health will come under increasing scrutiny and production methods will need to be altered to improve nutritional content and address key human health concerns.

In addition to improved nutritional content of food, the impact of production systems on the health of the environment will become increasingly important. Industry must reduce the impact of production on water and air

quality, and must eliminate its role in antibiotic resistance. A large body of evidence links health conditions and premature death to environmental pollution.

Precision farming techniques are going to be vital in delivering against this agenda. Regardless of the enterprise type (plant based or animal based), the reduction in application of pesticides, slurries, manures, fertilisers can only be beneficial – to the point where only the exactly required amount of nutrient is applied and there is no nutrient loading of land. This is referred to as 'nutrient neutrality'.

However, this optimisation of input is only workable if the baseline figures are known and that ongoing monitoring takes place. This includes knowing soil organic content, mineral content, chemical composition, plant growth rate, high risk run-off areas, water flows, and it needs this information to be geolocated (mainly using GPS coordinates). It also requires equipment which is capable of only applying nutrients to the required areas. Most farms in the studied regions are not fully equipped to deliver this just yet, but the capability is within the reach of all and it indicative of the type of equipment which will be purchased over the next decade.

1.1.7 CAP reform

The Common Agricultural Policy is being reformed following the UKs exit from the EU. The Northern Ireland protocol permits the Northern Ireland executive to design its own farm support programme, but the total amount that can be spent each year is capped at an initial ceiling of £382.2 million, roughly the same level as previously.

Future arrangements are, as yet, unknown, however, it is clear that the structure of the payments will change and that there will be a strongly increased focus on the delivery of public goods. Essentially 'public money for public good'. The exact specifications of what will be included under 'public good' payments is not yet defined, but is likely to include carbon reduction, biodiversity, public access, improvement of air and water quality, flood control etc. What is certain is that there will be a reduction in direct support, which is likely to primarily impact beef and lamb numbers as these enterprises are the primary recipients of the existing support.

1.1.8 Soil National Health Scheme

The proposed soil national health scheme will commence in 2022/23 and will, over a four-year period, deliver geo-linked analysis of almost all soils in Northern Ireland. This will enable a clear understanding of soil quality across almost all farms in Northern Ireland, which will enable much more accurate application of nutrients, improving the potential of the soil to produce grass or crops, and improving water quality through the reduction of nutrient run-off. In addition to this, LiDAR analysis of the land will also be undertaken. This will enable a strong assessment to be made of the above ground carbon capture on each farm, offsetting the carbon cost of food production and enabling a much more accurate assessment to be made about the true carbon cost of land-based enterprises. The LiDAR analysis also has the capability of predicting above ground water flow, enabling areas which cause high nutrient run-off to be avoided when nutrients are being applied.

1.1.9 Scientific and Technological Development

The scientific understanding of the impact of agri-food will have considerable influence on the requirements placed on the sector. Considerable debate has commenced on the correctness of using CO_2 equivalence (CO_2e) as the measure of impact, with a growing number of scientists suggesting that we should be considering global warming impact instead. There are a number of reasons for this, and it seems likely that there will be a move towards this in the coming years. This is important because agriculture's impact is reflected very differently under the two scenarios, and if CO_2 equivalence continues to be used, changes in agriculture will be dramatic, whereas under the 'impact on global warming' scenario, agriculture could, with some effort contribute to global temperature decrease inside about 20 years.

Regardless of the assessment scenario used, agri-food must make significant changes to reduce impact on the environment, and technology will be required to enable targets to be achieved. The technology will include tools to measure efficiency, measure pollution/impact, measure biodiversity etc, as well as including tools which physically affect production or pollution. Many of these tools do not currently exist and must be developed. Consequently science and development centres are vitally important to the future success of the sector.

The food sector is also heavily dependent on low-cost labour, and availability is going to decrease in the next few years. As a result, the uptake of automation has to increase, as has the development of new machinery which can deal with the often highly variable food types processed in Northern Ireland.

1.1.10   Ongoing Knowledge Exchange

As already stated, considerable development is required to enable the industry to reduce its impact on the environment and its dependence on manual labour, but much of the appropriate technology already exists. However, many businesses and organisations are not aware of the technology, which is available, and as a consequence do not implement it. Improved knowledge transfer to businesses could transform this.

1.1.11   The requirement to demonstrate environmental sustainability

The current world political climate is reinforcing the importance of local food production, and demand is only going to grow. However, it is almost certain that the highest paying markets will only be accessible to producers who can demonstrate the sustainability of their production.

Currently, there is almost no measurement of the environmental performance of the agri-food sector, particularly at farm level. Some measurement is taking place at factory/processor level, but there is little independent audit and reporting of performance.

Sustainability requirements will be measured across a number of components, some farm based, others more focused on further production and distribution. These will include:

1) Farm: impact on carbon, air quality, water quality, biodiversity
2) Factory: energy usage, recycling, water usage, packaging, food waste
3) Distribution: Transport distances, fuel used.

In the near future there will be a requirement for independent auditing and reporting of environmental performance. Key retailers will face consumer demand to demonstrate sustainability of their supply chains and suppliers/processors will have to conform. This will involve changes at farm and factory level.

Progress in environmental sustainability is likely to be driven most rapidly by multiple retailers, particularly since this is the major market for much of Northern Ireland's food output.

Key Agri-Food Challenges

There are a wide range of challenges affecting primary agriculture and hence the upstream food production sector.

1) **Agricultural production methods.** The production of primary food is associated with a high proportion of the final environmental cost of food and, consequently, changes within this component of the chain can make a very substantial difference to the overall cost.
   - Life Cycle Analysis of food chains is used to assess the environmental cost of food production. Foundation Earth is a non-profit organisation which is dedicated to assessing the environmental cost of production of different food chains. They assess farm production, processing, packaging and transport. Their figures suggest that farming accounts for almost 70% of the environmental impact of the production chain.
   - Poore and Nemechek (2018): Poore and Nemecek consolidated data covering five environmental indicators; 38,700 farms; and 1600 processors, packaging types, and retailers. They found that impact can vary 50-fold among producers of the same product, indicating that there is substantial potential to reduce the environmental cost of production across multiple food chains.

2) **Post-harvest handling.** A significant inefficiency in the agricultural production chain is the amount of food which is wasted before it reaches the consumer.
   - The FAO produced a report entitled 'The State of Food and Agriculture' in 2019. The report found that around 14% of the world's food is lost after harvesting and before reaching the retail level, including through on-farm activities, storage and transportation. However, it also found that the food losses vary considerably from one region to another within the same commodity groups and supply chain stages. At the regional level, estimates range from 5-6% in Australia and New Zealand to 20-21% in Central and Southern Asia.

3) **Increased Global Demand for food.** Global population is continuing to grow and the demand for food will continue to increase. In addition to population increase, world economic growth will also drive the demand for food consumption, particularly high protein food products. This will drive increased value in high protein products, which, in turn will create increased incentive to produce high protein products. The increased global demand for food comes in conjunction with the need to reduce impact.

4) **Increased need for Food Security.** Current global events have emphasised the importance of ensuring that global food production remains secure. Geopolitical events have shown that this is not the case and that over-reliance on imported food production is a significant risk to a country's welfare. This has the potential to encourage both the production and consumption of locally sourced produce.

5) **The need to impact less.** Regardless of the need to maintain or increase food production, there is a need to reduce the environmental impact of food production. The environmental impacts include air pollution, water pollution, water use, biodiversity impacts, flood resistance etc. Farmers and scientists must work together to achieve the key targets.

2 Areas studied during the production of this report

This study is an in-depth look at four council areas, namely Armagh, Banbridge & Craigavon Borough Council, Causeway, Coast & Glens Borough Council, Fermanagh & Omagh District Council and Mid Ulster District Council. Although the outcomes are ultimately designed to be applicable to all Councils, it is essential to first look at each area, with its own strategic context and policies in its own right. This will allow the research team to identify the common ground between them, and therefore the correct tools to encourage the development of the sector across all four.

2.1.1 Armagh, Banbridge and Craigavon Borough Council

Armagh, Banbridge and Craigavon Borough Council has a population of around 199,639[1] which accounts for 11% of the Northern Ireland population. Its main population centres are the Craigavon Urban Area (which includes Central Craigavon, Lurgan and Portadown), Banbridge and Armagh.

The Agri-Food sector is by far the biggest in the borough, accounting for 50% of total employment in the area, and 51% of total sales when divided by sector[2] bringing around £1,382,000,000 into the local economy.
Throughout the Borough, there are 1825[3] registered food businesses, which are broken down into different categories as Fig.1

Figure 1 – Food Business Types in Armagh, Banbridge & Craigavon Borough Council
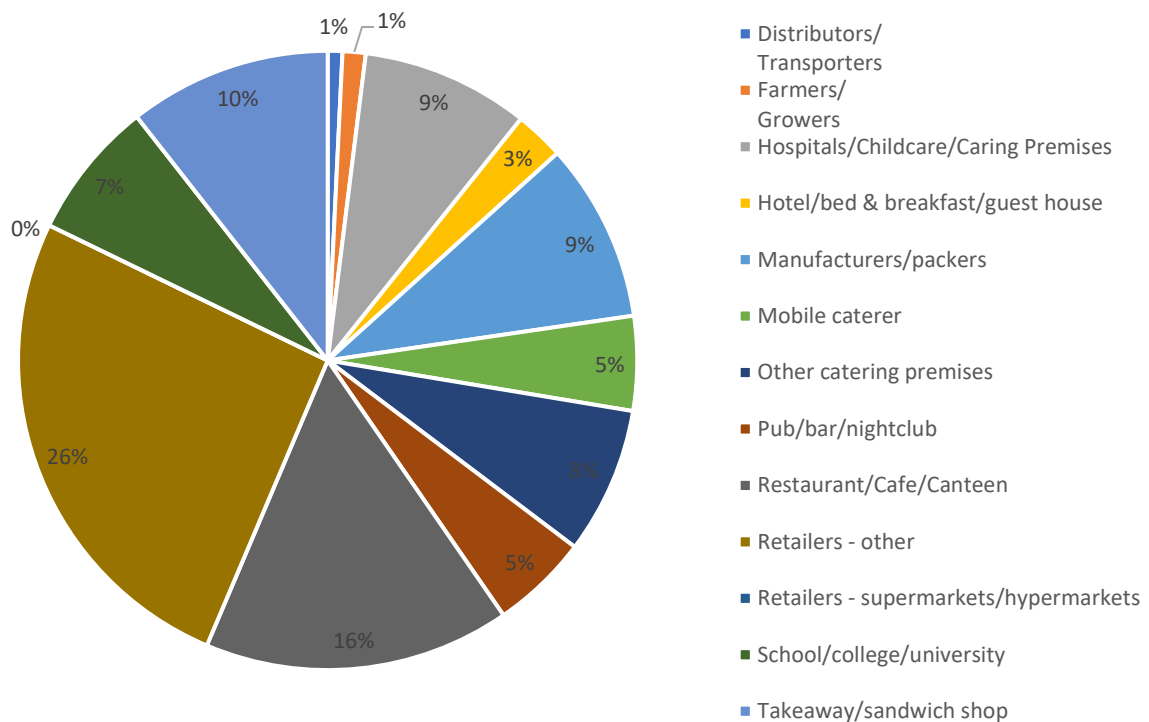
From the above, we can see that retail - other accounts for the biggest proportion of food sales in the borough, 10% more than Restaurants/Cafes etc. It's important to note, however that the figures for the retail – other category also includes businesses that don't fall into the other categories such as sports clubs etc., so the figures are slightly skewed. As with all the areas in this study, the food businesses within the Armagh, Banbridge and Craigavon Borough have excellent hygiene ratings, with 78% achieving the highest rating of '5' and only 2% awaiting a score.
Within the area, food producers are supported by the Food Heartland which is an initiative run by the council. This was developed in April 2015 to specifically promote the agri-food sector in the borough during the Northern Ireland Year of Food and Drink in 2016. Throughout the year, Food Heartland incorporated a series of themed events and

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[1] 2011 Census, Office of National Statistics
[2] Invest NI Supported Business Performance 2017
[3] Food Standards Agency

initiatives to showcase excellence in agri-food production in the Borough, including the Food and Cider Festival and Food Heartland Awards, which was underpinned by various marketing initiatives.

The Food Heartland Forum provides a unique platform for the Council to work closely with agri-food businesses and various support bodies to drive the local agri-food sector forward. From food and drink producers to businesses involved in the wider supply chain, the forum is focused on developing a strong voice for the local agri-food sector and facilitating opportunities to lobby on key sector issues.

The collaborative initiative meets regularly and is committed to ensuring engagement and representation from key policy stakeholders including: Food NI; Northern Ireland Food and Drink Association; Southern Regional College; Agri-Food and Biosciences Institute; College of Agriculture, Food and Rural Enterprise; and the Department of Agriculture, Environment and Rural Affairs.

Food Heartland has a visible presence at events like Country Comes to Town and numerous stands in the food pavilion at Balmoral Show, bringing the Food Heartland brand to a wide audience, along with the work done within the Borough for producers via the Food Heartland Forum and eateries via the Hospitality Forum.
Food Heartland is committed to helping support the growth and development of the abundance of specialist artisan food and drink producers within the borough, and is currently delivering on a 60k plan for 2021.
Businesses can also join the 'Lough Neagh Artisans' network which has recently been established. Members of the Lough Neagh Artisans live within 10 miles of the Lough and operate as a collective. The group believes that there is a strong need to collaborate among Lough Neagh businesses which complement each other and inspire people from around the world with their crafts, food and drink, hospitality and experiential initiatives which are unique to this part of the world.

2.1.2 Causeway Coast and Glens Borough Council

Causeway Coast and Glens Borough Council, located along the North Coast has a population of around 144,943[4] with 81.4% of the 41,733[5] employee jobs accounted for in the services industry.
Throughout the Borough, there are 1614[6] registered food businesses which are broken down into the categories outlined in Fig. 2

Figure 2 – Food Businesses in Causeway, Coast & Glens Borough Council
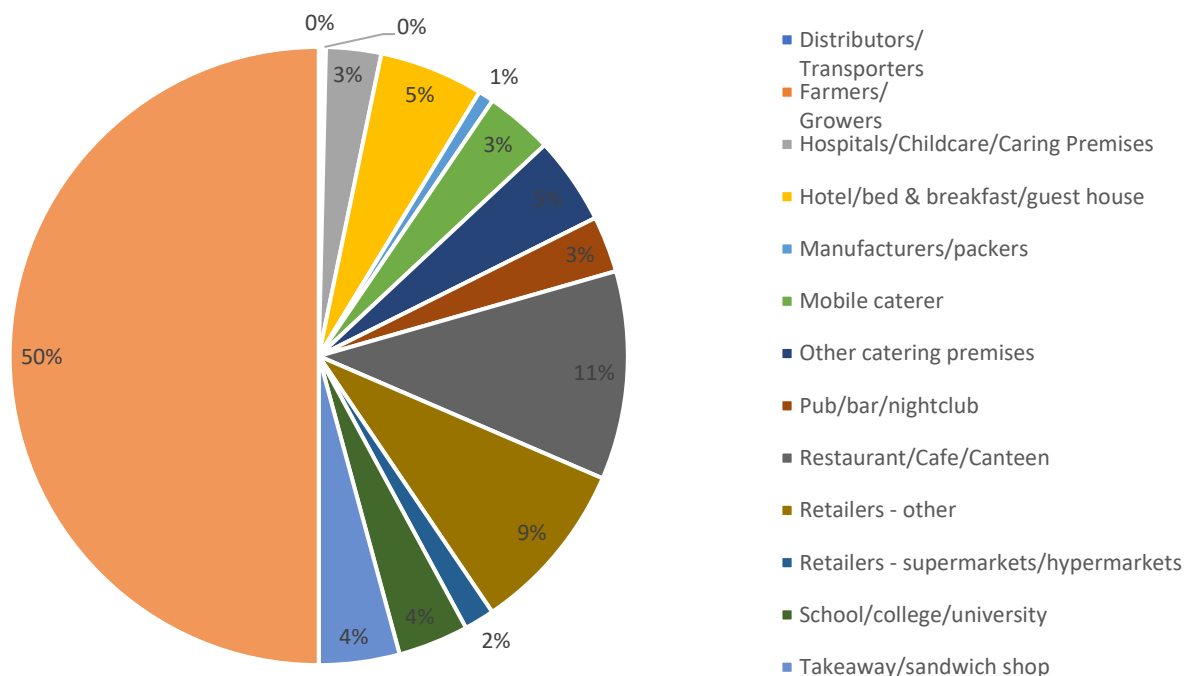
As can clearly be seen above, 50% of registered food businesses in the Borough are from farmers and growers, which aligns with its large tourism sector, with Restaurant/Café/Canteens being the second largest closely followed by Retailers-Other.

As with all areas in this study the food business within Causeway & Glen district have excellent hygiene rating with 1209 establishments receiving a 5* rating and 68 establishments awaiting an inspection.

Within the Council area there are several initiatives run by both Council and private stakeholders which help encourage businesses in the area. Taste Causeway is the local food network, an All-Ireland Foodie Destination Award Winner and an accredited Slow Food Destination. The network currently has around 122 businesses which all pay a yearly membership fee and who have a listing on the Taste Causeway website, can use the branding and have access to other benefits. Members of the taste causeway & slow food causeway won 5 out of 10 prestigious slow food awards N.I and were recognised for their dedication in delivering quality and sustainable food products.

There are also two regular, well supported markets in the Borough, one of which is run by the Council. These have been growing over the last year, are well supported and help to bring business into the locality. The causeway speciality market was established in 2006 and meets on the 2nd Saturday of every month, it can accommodate 52 stall holders of which 38 of those are permanent.

2.1.3 Fermanagh & Omagh District Council

Fermanagh & Omagh District Council has an estimated population of 117,337[7] and the district spans approximately 3,000 km2, the district is the largest in terms of land mass but the smallest in terms of population with an Agri-Food sector of around £200m sales[8]. Throughout the District there are 1415 registered food business (1096 have been registered with a 5* food hygiene rating), which are broken down into their categories in Figure 3 below.

Figure 3 – Food Businesses in Fermanagh & Omagh District Council
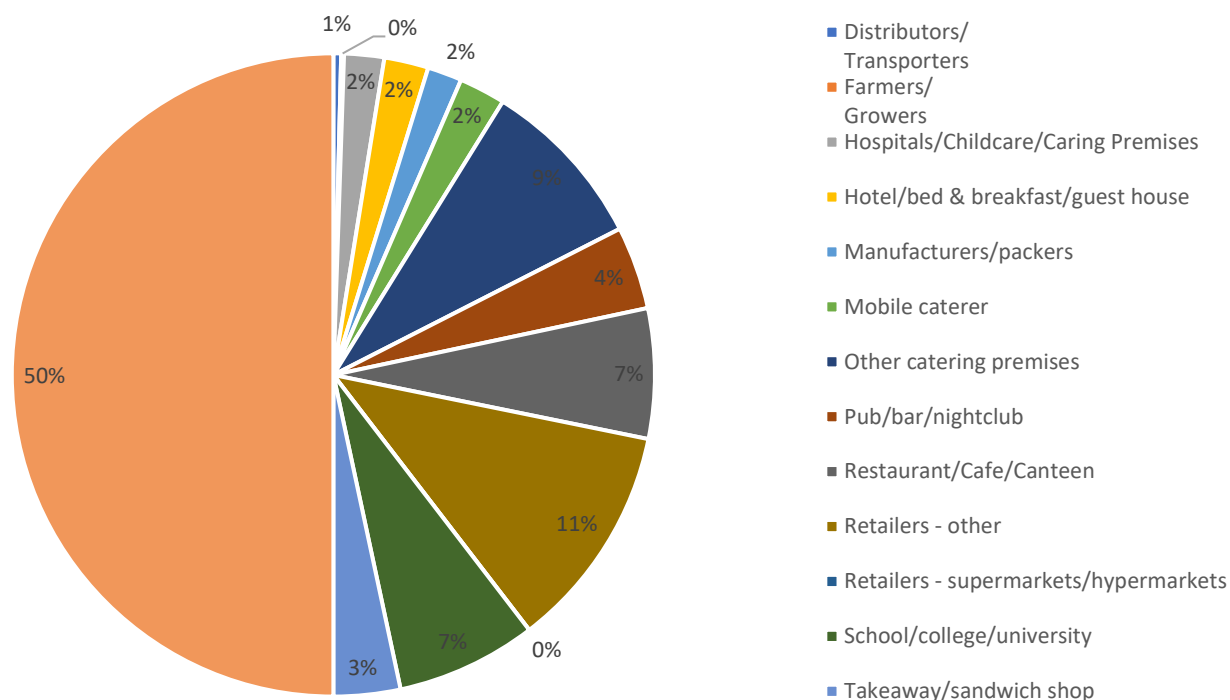
As you can see from the graph above, half of the food businesses in the district are farmers/growers. This is consistent with Fermanagh and Omagh District Council having the largest farming sector in Northern Ireland[9]. Over 20% of the Northern Ireland agriculture sector is based within this district, with 5248 farms[10]. It's also important to note that the district has the largest land border with the Republic of Ireland, giving it a significant border catchment area.

Within the district we were unable to identify either a food network or a regular farmers market although in the past there have been different initiatives such as the Omagh Food Fair organised by the Ulster Herald.

2.1.4 Mid Ulster District Council

Mid Ulster is the fastest growing Council area in Northern Ireland. Their multicultural population of 146,427 is forecast to grow to 165,000 by 2030. Sixty-two percent of people in the area are of working age and 76% are economically active. They share a land border with Ireland, which means 450,000 people live within a 50km radius of the district's boundaries – a major catchment which enables businesses to find skilled employees. Within the district the Agri-Food sector by sales generates around £911m, 27.3% of total sales in the area. The sector has 1392 registered food businesses, distributed as shown in Figure 4 below of which 1118 have been awarded 5* food hygiene rating.

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[7] 2020 Census, Northern Ireland Statistics and Research Agency
[8] Invest NI Supported Business Performance 2017
[9] Armagh, Banbridge & Craigavon Borough Council Agriculture Strategy, 2021
[10] 2020 Census, Northern Ireland Statistics and Research Agency

Figure 4 – Food Businesses in Mid Ulster District Council

Legend:
- Distributors/Transporters
- Farmers/Growers
- Hospitals/Childcare/Caring Premises
- Hotel/bed & breakfast/guest house
- Manufacturers/packers
- Mobile caterer
- Other catering premises
- Pub/bar/nightclub
- Restaurant/Cafe/Canteen
- Retailers - other
- Retailers - supermarkets/hypermarkets
- School/college/university
- Takeaway/sandwich shop
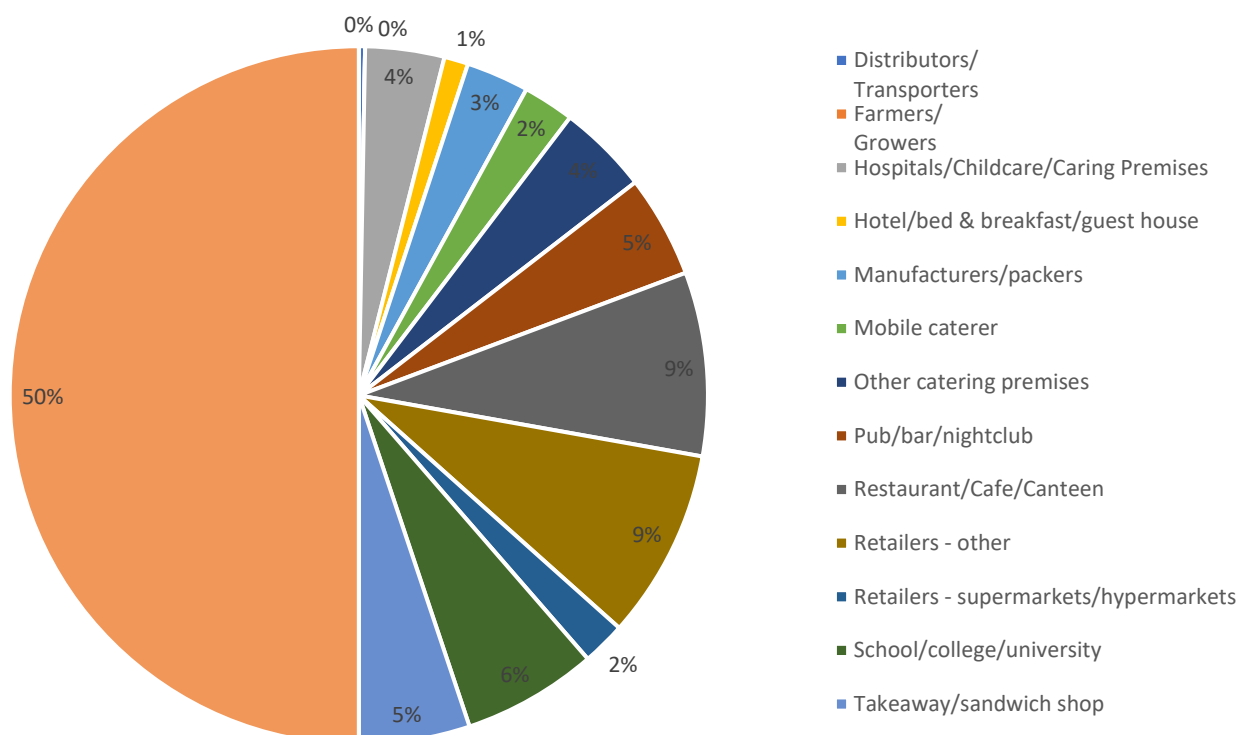
50% of food businesses in Mid Ulster area are Farmers or Growers and this is consistent with the region having the second largest agriculture sector in Northern Ireland[11].

The District has one regular farmers market in Dungannon which is held twice a month, businesses can also join the 'Lough Neagh Artisans' network which has recently been established. Members of the Lough Neagh Artisans live within 10 miles of the Lough and operate as a collective. The group believes that there is a strong need to collaborate among Lough Neagh businesses which complement each other and inspire people from around the world with their crafts, food and drink, hospitality and experiential initiatives which are unique to this part of the world.

This region launched a programme entitled 'Taste Mid Ulster' in September 2021. This programme seeks to enable the Council to take the high quality food and drink offering of the region and develop a programme of support to help co-ordinate and enhance the food and drink tourism offering. An activity programme has been mapped out and will be rolled out across the District. The programme is intended to complement the "Embrace A Giant Spirit" brand and the new "Unwinding Time" brand in Mid Ulster. The Council is also working closely with Tourism NI and their Food & Drink programme.

Initiatives within the planned programme of support include:

- *A Taste Mid Ulster Food Trail & signature dishes*
- *A Suite of Film and Photography to promote the initiative*
- *A Programme of Cookery & Meet the Growers / Makers Demos*
- *Food & Drink Tourism Experiences*
- *A banquet on Hill of The O'Neill focused on 90 attendees from the travel trade, media and tourism sector nationwide*

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[11] Armagh, Banbridge & Craigavon Borough Council Agriculture Strategy, 2021

Programme Outcome

This programme will offer food and drink businesses across the District reasons to enter the Food (and Drink) Tourism Market. The development of a range of new products will create more reason to travel to and within NI and Mid Ulster and will encourage more spend.   It will also offer the opportunity to enhance the existing and create new, exciting immersive experiences.

The programme is in its early stages and requires significant support, but is indicative of the type of initiative which can advantage food producers by boosting visitor numbers and sales.

3 The Economic Value of Agri–Food

"Assessment of the economic impact of agri-food businesses in NI and the likely economic impact of different levels of achievable growth"

Total economic output of each area

The total economic output of each area in the study is shown below.

Region	Value
Armagh, Banbridge and Craigavon	£2.9 billion [12]
Causeway Coast and Glens	£1.9 billion[13]
Fermanagh and Omagh	£1.6 billion[14]
Mid Ulster	£2.075 billion[15]
Total economic output	**£8.475 billion.**

Value of agriculture in each area

The below table shows the number of Northern Ireland producers in each sector which is represented by each council area in the study

Council	% of NI	Cereal	General Cropping	Hort	Pigs	Poultry	Dairy	Cattle/ Sheep LFA	Cattle Sheep Lowland	Mixed	Others	Total
Armagh City, Banbridge and Craigavon	13%	54	178	132	30	98	355	1,123	1,340	110	11	3,431
Causeway Coast and Glens	10%	33	110	6	11	65	332	1,366	592	66	6	2,587
Fermanagh and Omagh	20%		159	7	16	93	501	4,371	77	16		5,248
Mid Ulster	17%	31	157		45	192	419	2,425	976	89		4,357

The below table shows the percentage of Northern Ireland production for each sector which is represented by each council area.

Council	% of NI	Cereal	General Cropping	Hort	Pigs	Poultry	Dairy	Cattle/ Sheep	Mixed	Others
Newry, Mourne and Down	16%	15%	15%	8%	14%	7%	10%	17%	13%	20%
Armagh City, Banbridge and Craigavon	13%	21%	16%	58%	17%	16%	14%	12%	22%	22%
Causeway Coast and Glens	10%	13%	10%	3%	6%	10%	13%	10%	13%	12%
Fermanagh and Omagh	20%	0%	14%	3%	9%	15%	19%	22%	3%	0%

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[12] [Armagh City, Banbridge and Craigavon: Entrepreneurial Place - agendaNi](#)
[13] A snapshot of the local economy in Causeway Coast & Glens: COVID-19 and after
[14] Fermanagh & Omagh District Council Council Area Profile September 2019
[15] [Key Statistics | Mid Ulster District Council (midulstercouncil.org)](#)

Mid Ulster	17%	12%	14%	0%	26%	31%	16%	17%	18%	0%

The below table shows the percentage of farm production represented by the Mid-South West region.

Council	% of NI	Cereal	General Cropping	Hort	Pigs	Poultry	Dairy	Mixed	Others	Sheep & Cattle
MID SOUTH WEST	50%	33%	45%	62%	53%	61%	49%	44%	22%	51%
REST OF NORTHERN IRELAND	50%	65%	50%	29%	46%	39%	42%	56%	36%	49%
TOTALS	100%	98%	95%	91%	98%	100%	91%	100%	58%	100%

The below table shows the value production for each sector each council area.

	NI Value	ABC Value	Fermanagh & Omagh Value	Mid-Ulster Value	Causeway Coast and Glens Value
Horticulture	£95.4m	£55.3m	£2.95m	£0	£2.5m
Dairy	£667m	£93.4m	£128m	£107m	£85m
Pigs	£217m	£36.9m	£20.1m	£56.4m	£13.8m
Poultry	£229m	£36.6m	£33.9m	£70.0m	£23.7m
General Cropping	£62.0m	£9.9m	£8.9m	£8.8m	£6.1m
Cattle & Sheep	£522m	£62.6m	£114m	£87.2m	£50.2m
Est. Total Subsidy Value	£625m	£81.2m	£127m	£105m	£62.4m
Total economic output		£376m	£435m	£435m	£244m
Total value		£1.49 billion			

Value of agriculture and agri-food processing in each area

The gross value of agri-food products is not available per council area, but can be calculated with a certain degree of accuracy from the overall Northern Ireland figures. Broadly, agri-food output is twice the value of primary agricultural output in Northern Ireland, so approximation of total value can be obtained using the council area figures for primary agricultural value. Total agricultural output from the studied regions is £1.49 billion, equating to around £2.98 billion of food output. Pro-rata, this suggests the following values for food production in each region;

Region	Value
Armagh, Banbridge and Craigavon	£752 million
Causeway Coast and Glens	£488 million
Fermanagh and Omagh	£870 million
Mid Ulster	£870 million
Total value of agri-food output	£2.98 billion

These values do not include the value of sales of product within the area from cafés, restaurants, accommodation providers and other food retail. The total value of the agriculture, agri-food and food in the regions is significantly greater than this.

Value of agri-food as a % of total economic performance

The total economic output of the combined region is around £8.5 billion, which allows the total value of agriculture and agri-food production to be calculated as a proportion of total regional output.

	Total Economic Value of Region	Total Value of Agricultural Production	% of Total Economic Value	Total Value of Agri-Food Production	% of Total Economic Value
Armagh, Banbridge and Craigavon	£2.9 billion [16]	£376m	13.0%	£752 million	25.9%
Causeway Coast and Glens	£1.9 billion[17]	£244m	12.8%	£488 million	25.7%
Fermanagh and Omagh	£1.6 billion[18]	£435m	27.1%	£870 million	54.4%
Mid Ulster	£2.075 billion[19]	£435m	21.0%	£870 million	41.9%
Total economic output	**£8.475 billion**	**£1.49 billion**		**£2.98 billion**	

The above table shows how important agriculture and agri-food is to the economies of each region in the study. Total value of agricultural production ranges from 12.8% to 27.1% of each region, with the value of agri-food ranging from 25.7 to 54.4% of the region's economy. It should be acknowledged that there is a lack of certainty in some of the figures as the specific values for each individual county in the report and the figures have been calculated on a pro-rata basis from overall Northern Ireland figures.

4 Business interactions and importance of the agri-food sector

An analysis of the agri-food sector in the target regions reveals a large degree of interdependency between businesses. Even relatively small farms engage the services of up to twenty different suppliers, with large processors often engaging with several hundred (or several thousand if farms are included). The diagrams on the following pages give an indication of the business flows, but are not exhaustive, and in truth many other organisations may also be involved (marketing organisations, web developers etc.).

These flows emphasise the importance of the sector for wealth distribution. The majority of non-agri related business are based in large population centres and focus wealth generation in these areas. Most agri/agri-food related businesses are rurally located, offering employment in these areas and ensuring that wealth is distributed to areas where there is little other employment.

Consequently, judgements made on investment into agriculture or agri-food must consider social policy as well as economic, although there is sometimes a challenge in equating the two. Usually, social policy needs to be valued, allowing the calculation of cost-benefit prior to investment.

It is clear however, that investment in agriculture/agri-food/food is an investment in the whole economy. Good food generates wealth, and establishments which product, sell or serve good food are attractive to both locals and visitors, benefitting businesses and tourism/leisure/hospitality businesses through increased footfall and awareness.

Gross value of primary agricultural output in Northern Ireland is around £2.5 billion, rising to over £5 billion when further processing is taken into account. The value of primary agriculture in the studied regions is £1.49 billion, with a similar amount added to this by the processing sector.

In general, the agricultural and agri-food sectors are relatively low net margin, running from 2% for much of the processing sector to approximately 15% for some of the more profitable agricultural sectors. Essentially this means that the majority of the businesses turnover is spent with other local businesses, creating a large amount of money turnover, primarily within localized areas.

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[16] Armagh City, Banbridge and Craigavon: Entrepreneurial Place - agendaNi
[17] A snapshot of the local economy in Causeway Coast & Glens: COVID-19 and after
[18] Fermanagh & Omagh District Council Council Area Profile September 2019
[19] Key Statistics | Mid Ulster District Council (midulstercouncil.org)

Value of businesses linked to agriculture in each area

The large value of agricultural production, support payments and agri-food processing in the studied regions also contributes to the success of other businesses inside each region and more widely across Northern Ireland as a whole. The following diagrams show the typical business flows associated with farms, small food businesses and larger food businesses. These diagrams are not comprehensive, but they give some idea of the level of interdependency. This does not include the other local businesses which are supported by farming families such as food retailers, restaurants, mechanics etc.

Farm Business Interactions
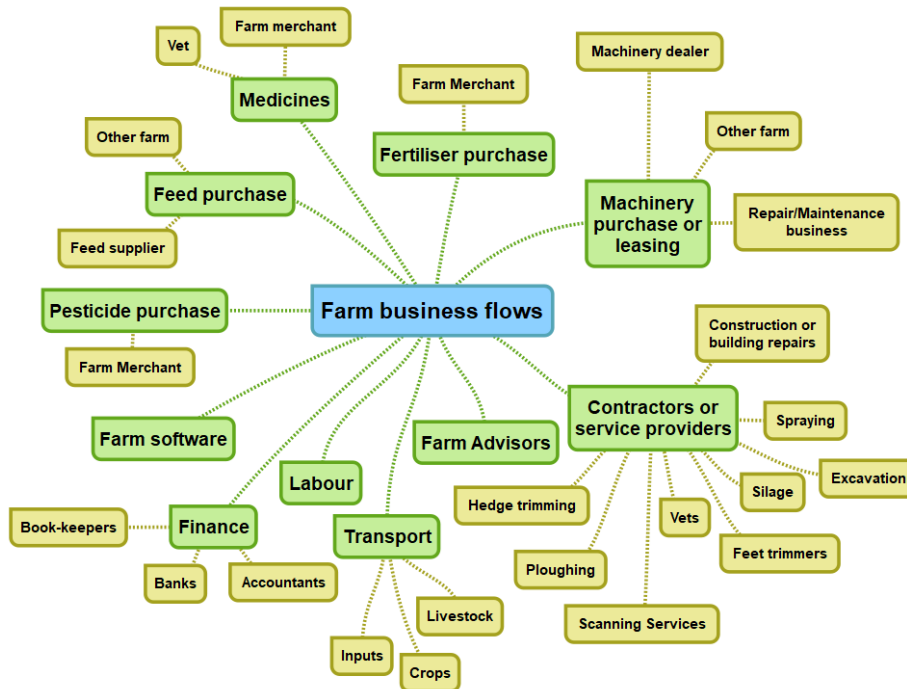
Small Food Processor Business Interactions
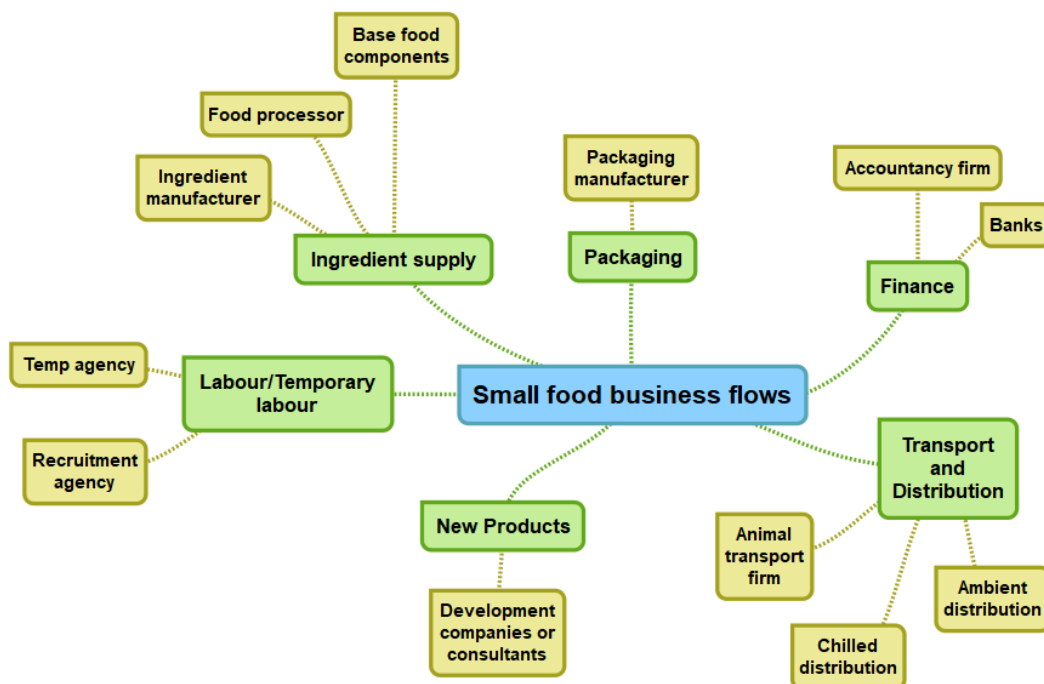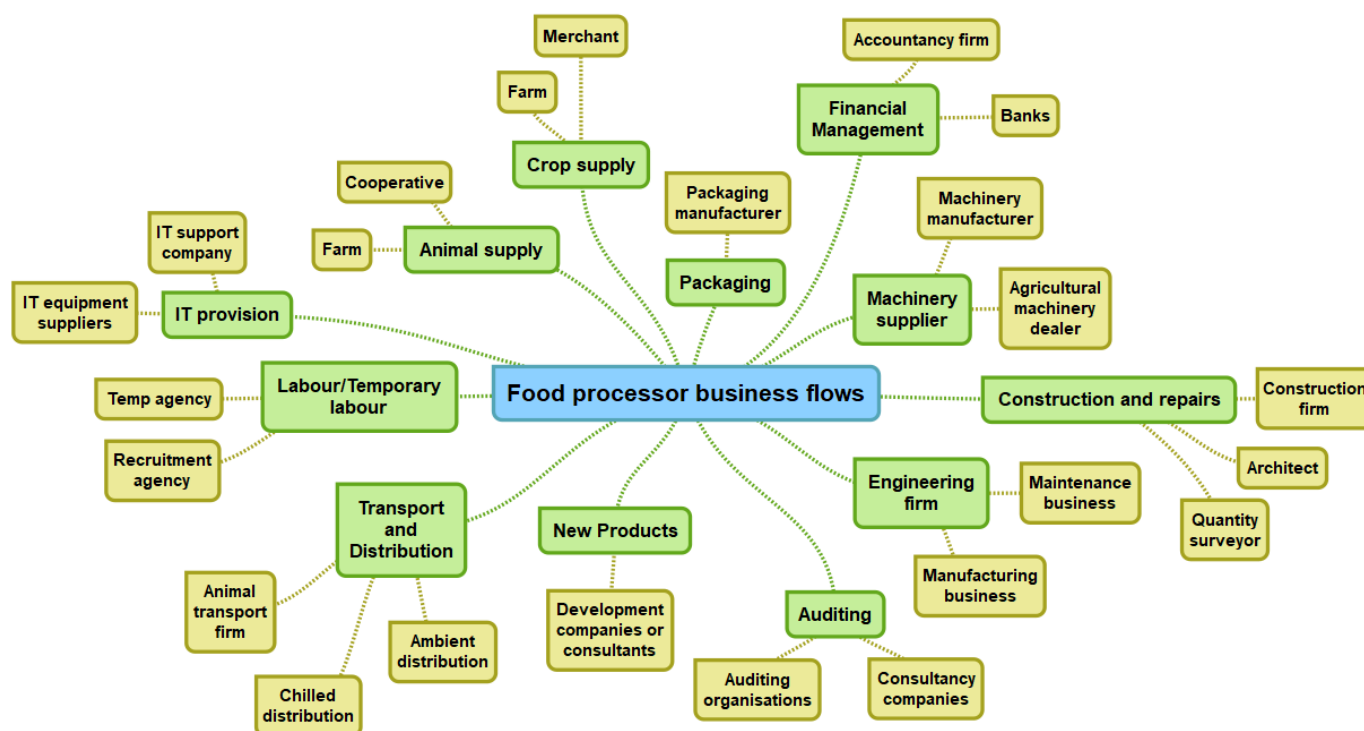
Discussions with business identified that farms will typically interact on a regular basis with about 20-30 other businesses, with small food producers interacting with up to 150. Large food processors interact extensively and it is not unusual for such a business to purchase goods or services from several hundred other businesses.
It is very clear that the business ecosystem is interlinked with multiple other businesses inside and outside the food sector. The disappearance or scaling down of food businesses without replacement will lead to a decline in the number of other healthy businesses in the area.

Total employment by agri-food businesses in NI

4.1.1 Food Processing Employment

Figures are not available at a local council level to indicate the number of jobs provided by the agri-food industry, but the figures are available at a national level. The table below is drawn from information provided by NISRA. It can be seen that the sector provides a significant proportion of the available jobs in Northern Ireland. Against total employment figures of around 820,000, food processing provides approximately 3% of the workforce (just under 25,000).

4.1.2 Agricultural Employment

Just over 51,000 people are employed in primary agriculture in Northern Ireland, approximately 6.3% of the workforce.

4.1.3 Agri-Service Business Employment

The Veterinary Council indicates that there are just under 3000 vets working in Northern Ireland at present, and over 1000 veterinary nurses.
A review of the feed businesses in Northern Ireland reveals that there are at least 92 animal feed manufacturing/retail businesses in Northern Ireland. Many of them are small, but some are large, and we estimate that between 1000 and 1500 people are employed in the animal feed sector.
A survey of Northern Ireland machinery dealers reveals around 210 businesses. With an estimated average employment of five people per business, this represents a further 1000 people employed in this sector. There are a further 30 or so plant hire businesses which will receive custom from the agri-food sector.

There are approximately 125 farm supplies businesses across Northern Ireland, again with an average of about 5 people employed in each, accounting for over 700 employees.

The above list of businesses is not exhaustive, but is indicative of how many other businesses and jobs which are enabled by the agri-food sector.

In addition to the above list, and not included because they are much more difficult to identify, are maintenance services, engineers, cleaning services, transport companies and packaging suppliers which are also enabled by the presence of the food sector in Northern Ireland.

4.1.4 Food Retail and Hospitality Employment

Food retail and hospitality is not directly linked to the agriculture and agri-food sectors, and to a large extent would exist independent of whether the production component of the industry exists in Northern Ireland or not. However the sector is supplied by many producers within the province, and considerable (although difficult to identify) value is added by the presence of local food and, in particular, local speciality food.

The Hospitality Sector in Northern Ireland employs 60,000 people and we estimate that at least three quarters are directly related to the sale, provision and service of food.

Business and Economic Statistics

The following table shows the economically active rate, earnings and value add for all business (including food) in the studied regions.

	Total Jobs	Economically active rate	Median earnings	Value added per head (workplace)
Armagh, Banbridge and Craigavon	72,866	75%	£20,384	£34,288
Causeway Coast and Glens	39,250	66%	£16,447	£28,236
Fermanagh and Omagh	39,387	70%	£19,141	£31,443
Mid Ulster	52,372	76%	£20,030	£37,326

Business survival rates

The following table shows the number of business startups and survival rate for all businesses in the studied council areas.

	Agriculture businesses	Agriculture %	Business birth %	Business births	1 year survival	1 year survival %
Armagh, Banbridge and Craigavon	2,355	28%	10.0%	635	545	90.0%
Causeway Coast and Glens	1,950	34%	8.9%	365	345	90.8%
Fermanagh and Omagh	3,635	47%	9.9%	450	355	91.0%
Mid Ulster	3,140	37%	9.3%	545	435	87.9%

The following table shows the number of businesses and % representation in selected categories for the regions being studied:

Council	Agriculture, Forestry and Fishing Estimate (Number)	Agriculture, Forestry and Fishing (%)	Manufacturing Estimate (Number)	Manufacturing (%)	Distribution, Hotels and Restaurants Estimate (Number)	Distribution, Hotels and Restaurants (%)
Armagh City, Banbridge and Craigavon	2,000	2.50%	13,000	13.40%	17,000	18.50%
Causeway Coast and Glens	2,000	3.50%	4,000	6.50%	12,000	21.80%
Fermanagh and Omagh	3,000	6.70%	5,000	10.60%	10,000	21.80%
Mid Ulster	4,000	6.10%	15,000	21.20%	13,000	18.50%
Northern Ireland	19,000	2.30%	81,000	9.90%	153,000	18.70%

The following table shows the overall sales of goods and services from and in Northern Ireland.

Sales of Goods and Services from Northern Ireland by destination, £ billion

Year	NI	External
2011	£41.0	£20.5
2012	£41.2	£20.9
2013	£42.5	£22.0
2014	£43.6	£22.7
2015	£43.9	£23.2
2016	£43.9	£23.8
2017	£44.2	£22.0
2018	£46.7	£21.7

Source NISRA

NI: IN PROFILE | Northern Ireland Statistics and Research Agency (nisra.gov.uk)

The following table gives an indication of the general size and distribution of businesses in Northern Ireland.

Businesses by Employment Size, 2020

Business Employment Size	No. of Businesses
0-9	67,915
10-49	6,485
50-249	1,365
250+	325

Source: Inter Departmental Business Register

The following table is not restricted to food businesses, but shows the relative importance from a job perspective of differently sized businesses in Northern Ireland. It is clear that a relatively small number of large businesses account for just over half of all business employment in Northern Ireland.

Employees by Business Employment Size, 2019

Business Employment Size	No. of Employees
0-9	112,533
10-49	124,458
50-249	140,284
250+	396,685

Total food sales by country of destination are recorded at a Northern Ireland level and are not available at a council level. The information in the following table is, however, relevant to the areas under study in this report. We are an exporting nation and it can be seen that we maintain a range of markets. The impact of Brexit is likely to change trade flows over time as trade tends to happen where it is easiest and where there are fewest barriers. Currently GB remains the most important market for Northern Ireland produce, followed by sales within Northern Ireland itself. Ireland is an important destination for NI food and is likely to grow in importance. Sales to other EU countries are smaller, but still significant, and it is possible that these sales will grow in the future due to Northern Ireland's continued easy access to the EU market.

It is important to understand the factors which impact sales. Northern Ireland food sales to GB benefit from the fact that it can carry a British flag, with the sales advantages which this brings. Northern Ireland produce into the EU carries an EUNI designation which, although unlikely to significantly damage sales, is still a hindrance into EU markets because buyer's computer systems must be changed to accommodate this, and in many cases it is simply not worth the effort. In truth it is difficult to exactly predict changes in trade flows, and food producers should ultimately focus on producing the food which is most likely to sell effectively (improving the quality, production standards and sustainability of food products).

The following table gives an indication of the value and destination of food products from Northern Ireland. Figures are not available per council area.

Total NI food sales by country of destination (£ million)				
	2018	**%**	**2019**	**%**
Northern Ireland	1294.8	25	1241.9	23.1
Great Britain	2518.4	48.7	2548.7	47.5
Ireland	789.1	15.3	855.6	15.9
Other EU	441.4	8.5	410.1	7.6
Other Countries	128.6	2.5	308.8	5.8
Intervention	0	0	0	0
Total Sales	**5172.3**	**100**	**5365.2**	**100**
External Sales	3877.4	75	4123.2	76.9
Export Sales	1359.1	26.3	1574.5	29.3

[1]These figures do not include an estimate of the turnover of food and drinks processing businesses with turnovers less than £250,000.

Size and performance of the NI food and drinks processing sector | Department of Agriculture, Environment and Rural Affairs (daera-ni.gov.uk)

The following table shows the number of jobs in Northern Ireland which are supported by the processing of a range

of different food products. These figures are for all of Northern Ireland, but the regions represented account for almost exactly half of the production in Northern Ireland, so (although not completely accurate) it is reasonable to divide the figures in this table by two in order to arrive at a reasonable estimate of food processing jobs in the regions being studied.

Number of direct full time employee equivalents		
	2018	**2019**
Animal By-Products	115	102
Bakeries	4,101	4,541
Beef & Sheepmeat	5,468	5,617
Drinks	1,424	1,442
Eggs	413	417
Fish	633	624
Fruit & Vegetables	2,847	2,959
Milk & Milk Products	2,354	2,299
Pigmeat	1,656	1,730
Poultrymeat	5,171	5,215
Total	**24,181**	**24,945**
Agency Employment	**2,749**	**2,034**

The salaries value of the individual sectors within agriculture are shown below. The figures are not given on a county by county basis, instead being from Northern Ireland as a whole. However the regions considered in this study account for almost exactly half of total production in Northern Ireland and, whilst not completely accurate, it is reasonable to apply the same conversion factor to the figures below, suggesting that the total salaries attributable to food processing alone is around £320 million – about 3.8% of the total economic output of the combined regions. The table below highlights the salaries associated with the processing of a range of different food products.

Wages and Salaries (£ million)[1]		
	2018	**2019**
Animal By-Products	3.9	3.9
Bakeries	95.1	106.1
Beef & Sheepmeat	145.7	137.2
Drinks	56.8	57.5
Eggs	8.9	9.1
Fish	12.0	13.6
Fruit & Vegetables	61.7	76.6
Milk & Milk Products	66.1	68.2
Pigmeat	37.0	40.5
Poultrymeat	121.9	126.4
Total	**609.2**	**639.1**

[1]These figures do not include an estimate of the wages and salaries of food and drinks processing businesses with turnovers less than £250,000.

5 Trends in food which will influence production

Ongoing food trends influencing purchasing

Value

Value remains a key driver of food sales. Price is often cited as a key driver, and for two similar products which are priced differently, lower priced products will always sell much more rapidly. However, the equation changes when the products have different quality attributes. At that point consumers then make a decision about how much they are willing to pay for the attributes which are offered by both products, then make a decision about which product to buy. Improved value drives improved sales.

Quality

Product quality is important to consumers, but quality perception differs substantially between individuals. There are several components of quality (not all of which apply to every food type);

- **Tenderness** is a key component of eating quality particularly for meat products.
- **Mouth feel** is also important for meat, but is also important for a range of other products as well
- **Fat content** strongly impacts the perception of quality. Usually it is a negative component, but for premium meat, increased intramuscular fat content can be associated with higher eating quality.
- **Maturation** is usually perceived as indicating higher eating quality
- **Healthiness and/or nutrient content** is a strong sales influencer, with a large proportion of consumers being willing to pay additional amounts for healthier products. Healthiness can include fat content, vitamin or mineral content or fibre content of the food.

Provenance

- **Product story** is important to the perception of quality. In reality, there is often very little relationship between objective product quality and the story behind the product, but multiple surveys show that a product with a very strong narrative command a higher price because consumers appreciate the transparency and place a value one it.
- **Provenance** can include an understanding of the origin of the product or the breed/variety, the production methods and/or the ethical nature of the trading relationships.

Integrity

- The **Integrity** of food supply is becoming increasingly important to current consumers.
- Ethical trading and independent assurance of this.

Sustainability

- **Sustainability** is important to the perception of quality and to appeal to the moral responsibility of the consumer.
- **Sustainability** is usually recognised as being related to the environmental cost of a food product, but in real terms should include economic and social sustainability as well.
- **Sustainable ingredients** will be demanded for composite food products.
- **Consumers and government** are likely to require measurement and labelling of food products.

New diet trends

- **Diet trends** are changing the way we eat. Vegetarianism, Veganism, Flexitarianism are all on the rise, and the likely increase in the cost of meat is likely to accelerate this change.
- However, several commentators also believe that a trend is emerging which will see a **return to traditional proteins** as many consumers have, over the past few years, tried plant-based alternatives to meat, but for a number of sensory/flavour and/or health reasons may choose to return to traditional meat based products. Despite this, growth in the sales of plant based products are still expected to increase.
- **Experiential Dining** is influencing a range of concepts including outdoor dining, pre-packaged meals from convenience stores/takeaways. This trend will fuel the willingness of customers to try new foods and the expectation is that product development of traditional food will underpin increases in sales.

Healthiness

- The **Healthiness** of food is becoming increasingly important to consumers. A range of factors can increase product demand.
    - **Reduced fat content** food
    - **Reduced salt and sugar** content

- o **Immune boosting/health boosting** food
- o High **protein content** food

Supply chain disruption

- Covid-19 has caused substantial supply chain upheaval and this is likely to continue for some time. There are a number of reasons for this, but primarily it has been driven by the availability of labour for food processing which has also been impacted by Brexit. Many factories have had to reduce production levels because they simply have not had enough staff to process or distribute food. Other issues are affecting primary agriculture and this will impact further up the supply chain as well. The most significant agricultural factor which will affect production is the significantly increased cost of artificial fertiliser. Costs have almost tripled and as a result farmers have substantially reduced purchasing and application and this will have a knock-on effect on crop growth and grass growth (and hence ruminant production). This will create shortages and delays in supply and will also lead to lower factory throughput, higher unit costs and a higher price to the consumer.

Home Delivery

- The rise in home hot-food delivery services is changing the way many eat. Deliveroo, Just Eat, Uber Eats and many more companies are growing rapidly and are delivering meals from multiple outlets direct to consumer's doors. Food service is likely to become an increasingly important market for food production.

6 Summary of feedback from communication with businesses and stakeholders

To inform the report, detailed feedback was obtained from over 60 businesses and many other organisations. Other information was added from existing reports and surveys. Multiple other stakeholders were also contacted during the research phase, providing information to explain the findings from the survey. Key findings were as follows:

Business expansion & available facilities

Over 80% of businesses intend to expand over the next 3-5 years. However, multiple businesses described how difficult it was to source facilities which are suitable for food production. Businesses indicated that neither land, nor facilities are easily available, particularly in terms of proximity to their existing facilities. The absence of available property or land means that many businesses resort to obtaining planning permission and extending/altering existing business facilities, with the attendant delays that this brings.

- Expansion requires the ability to source appropriate food grade facilities or the ability to expand existing premises, or the ability to build new premises.
- Expansion of existing premises or the building of new facilities requires an effective planning system which is able to rapidly assess and make decisions on planning applications.
- The provision of land with pre-approved planning permission is needed for each council area, there is a lack of availability at present
- Some of the land which is available to build business facilities on does not have adequate supporting facilities available to support the operation of food businesses.

Challenges around planning permission

Feedback around the planning process was mixed, with some businesses indicating that they were content with the planning process and the assistance which they received. Other businesses indicated that they found the process difficult, long-drawn out and uncertain, and that the delays were restrictive to business expansion.
Discussion took place around the specific challenges, which were identified as follows

- The uncertain time periods around obtaining planning permission were highlighted as a specific challenge.
- The planning process in England was highlighted as helpful, with clearly defined timelines which enable businesses to understand how long a development programme may take. The Northern Ireland planning system was criticized because of the uncertain timescales which do not facilitate planned development.

Access to funding for expansion

Approximately 43% of businesses say that they find it difficult or very difficult to access funding to expand the business

- Over 60% of businesses surveyed stated that they would benefit from assistance in sourcing business funding, but this also leaves a significant minority of businesses which are able to obtain funding relatively easily.
- In general, it is smaller businesses which expressed the need for assistance with funding. The larger businesses already have experience of successfully sourcing funding to enable business expansion.

The need for skills training

Over 54% of businesses need to deliver skills training for staff to enable them to meet the future demands of the business

- In general, businesses stated that they find it relatively easy to access training, with only 9.7% of respondents indicating that access to training was difficult, and only 3.2% of businesses indicating that access to training was very difficult
- Feedback on training is that sometimes it can be less focused than ideal, and sometimes too long. This can discourage the uptake of training, or the buy-in to the process.
- The range of skills training required varies between businesses, and interviews revealed that business owners were focusing more on the typical training.

Staff recruitment and retention

Recruiting and retaining staff is a challenge for many businesses
- a. Recruiting staff- 30%
- b. Retaining staff-6.7%
- c. Recruiting staff with the relevant skills/qualifications- 40%
- d. No staffing challenges- 40%

Sustainability

Sustainability is important to businesses, with the following actions being carried out by a higher than expected proportion of businesses.
- a. Waste Reduction -66.7%
- b. Shared Transport- 18.2%
- c. Recyclable & Biodegradable Packaging- 54.5%
- d. Energy optimisation- 36.4%
- e. Reuse of co/by-products- 27.3%
- f. Reduction of material inputs- 36.4%

Data collection and use for management

Only 50% of businesses believe that they collect enough data to manage the business to its full potential
- a. Some business operators stated that they have the ability to collect the appropriate data but a lack of time prevents this from using due to shortage of staff due to cashflow.
- b. Some businesses indicated that they don't collect enough information around energy use and this is growing in importance
- c. Other businesses indicated that they collect a lot of data, but it isn't always used effectively
- d. Yet other businesses collect or note trends, but they do not collect accurate figures

Uptake of business support

The majority of businesses have received support from their local council
- a. 51.7% of businesses indicated that they have received some form of support from their local council, higher than expected and indicative of generally good communication between businesses and the council.
- b. Communication with the local council was rated as generally positive for a range of businesses.
  - i. Very Satisfied with communication - 19.0%
  - ii. Satisfied with communication -28.6%
  - iii. Neither satisfied nor dissatisfied with communication - 28.6%
  - iv. Dissatisfied with communication levels- 17.9%
  - v. Very Dissatisfied with communication levels – 10.7%

Only 37% of businesses are involved in local development networks
- a. This number is surprisingly high and indicative of a desire to develop high performing businesses

Only 37.2% of businesses are Invest NI clients
- a. This is a very low level and indicates a key area which must be addressed to ensure that businesses have access to the maximum amount of support.

Business Interconnectivity

Businesses in the study areas are highly interconnected, with all businesses purchasing goods or services from multiple other businesses. Some of the larger businesses are purchasing from several hundred other Northern Ireland businesses.
- a. 0-5- 21.4%

b. 6-20- 39.3%
c. 21-50- 25%
d. 51-100- 7.1%
e. 100+- 7.1%

Multiple businesses highlighted the importance of the cleanliness and general appearance of areas surrounding the food production facilities as being important to product sales.

Summary of business challenges identified during the research

The previous sections have described the many types of businesses which are represented in the various areas. Each of these businesses is, in its own way, unique, with no business being identical to another. Good business demands an optimal range of conditions. Some of these conditions vary from business to business, but many are experienced by all businesses. In addition to the survey feedback identified previously, we explored business challenges much more fully via multiple interviews with business stakeholders in the regions being studied. This information built on that obtained via survey and the main findings are summarised below.

Condition	Description
Access to raw materials	All businesses require access to raw materials in order to produce their output. Primary food businesses require access to fertiliser, feed, land etc. Secondary food businesses require access to ingredients. These can be local, national or international.
Access to packaging	Many food businesses require access to packaging to enable food output. Packaging is critically important, and at times packaging can be a limiting factor. This is, however, a limited amount which councils can do about access to packaging. However, there is an increasing need for sustainable packaging to be used in order for businesses to maintain access to key high paying markets in the UK.
Suggestion: - Effective transport links are important for easing delivery of raw materials and packaging. Councils can lobby the Department for Infrastructure to ensure that road networks are suitable to enable rapid delivery of products. - Road upgrades around major food businesses and distribution businesses can increase efficiency of transport and ease of access to materials	
Access to power and fuel	All businesses require access to power and/or fuel to deliver processes. Access to inexpensive fuel or power will reduce the cost of production and increase competitiveness of business.
Suggestion: - Organisation of joint purchase of electricity and fuels may enable the purchase of more inexpensive energy. The council may be able to establish a mechanism by which small businesses can jointly purchase energy. - The reduction of energy use is also critically important. Councils can work with businesses to identify areas of excessive energy use and take steps to reduce this. - Creation of council-led schemes to investigate efficiency of power usage within local businesses, comparison between companies and sharing of information about best practice. Council should measure energy use reduction as a result of the scheme. - The scheme should also investigate the use of renewable energy and should also enable the sharing of information between businesses about the most effective use of renewables.	
Access to Food Grade Facilities	Multiple businesses within this study identified the absence of suitable space to expand as one of their most significant challenges. Many of these businesses were established,

	medium to large businesses not just startups. They indicated that food grade facilities were necessary because:
	1) Established businesses need external space to try out new production processes, and/or equipment. The majority of food production businesses are already very tight for space and are unable to test new procedures in existing facilities. 2) Established businesses sometimes wish to create spin-off businesses, but do not have the space to do this within existing facilities. Discussions with other very small businesses also revealed that there is a need to provide facilities to enable tiny businesses to move from kitchen tables into more suitable, larger facilities which enable the expansion of the output of each business.
Access to land to expand	In the absence of suitable pre-prepared food facilities, businesses need to be able to identify areas where they can build appropriate facilities. Often planning permission is a challenge for businesses which need to expand quickly and not be delayed by a planning process which is open ended and without clear deadlines.
Access to land with appropriate services	Several businesses identified the fact that land which has pre-approved planning permission is still associated with restrictive timelines because the necessary services which enable food production are not connected. NI Water was identified as a particular challenge, with long timelines to connect the necessary water supply.
Obtaining planning permission can be difficult	A range of businesses identified the planning process as problematic, partially because of uncertainty around what developments were likely to be permitted and, more importantly, because there are no specified times around the length of time it will take for a decision around granting or rejecting of the application. This was not the case for all businesses which responded, with some saying that their local team was helpful and efficient. The majority of businesses indicated the need for a streamlined planning process with defined timelines, as well as full support through the process to maximise the chance of success.
Suggestion: • Deliver an immediate review of the availability of food grade facilities in the studied regions. • Planning challenges can restrict the ability of businesses to expand • Council produce a report clarifying the challenges which most businesses face around expansion, the barriers/blockages to turning around planning decisions within the context of relevant planning policy and suggesting ways to accelerate planning approval • Councils to meet regularly with local businesses to better understand ways to accelerate economic development	
Access to adequately skilled staff	Many businesses have reported that access to staff is a challenge. There are two components, firstly the availability of people to fill roles, and secondly, finding appropriately skilled roles.
Training provision	Training is necessary in business. Training enables upskilling of staff and the raising of individual staff performance. Training can also enable the implementation of advanced practice and the latest technology, improving business productivity and performance Training is also needed around the collection and use of data for management within many of the businesses within this report.

Automation	Most food businesses have several areas which require multiple unskilled operatives. Generally these roles do not add value to the product and can be replaced by automation. A good example of this is end of line packaging of product. Most businesses are able to utilise robotics to replace end of line labour.

Data collection and use for management	Data collection and use for management has been identified as a key issue by multiple businesses. Within businesses in this report, data collection is often inadequate and the data which is collected is usually contained with a number of systems which do not communicate with each other. All of this means that management decisions are often not made on adequate information and, as a result, business development is not as effective as it could be.

Broadband Speed	Most of the companies within the report have access to broadband of adequate speed. A number of business do, however struggle with low connection speeds. The absence of adequate broadband speeds is usually associated with low record keeping, manual record keeping, transcription errors, and low levels of data analysis.
Appropriate, connected software platforms	Many of the businesses in the study do not have adequate software in place to manage their businesses effectively.

Telling the business story	Difficulties around business publicity were identified by many small businesses. Many small businesses have a small staff who are focused on customer service rather than business promotion. As a result, business promotion and publicity is ignored, or performed to a sub-standard level, and the business misses out as a result.
Marketing	Multiple businesses identified marketing as a challenge. Again, repeating a regular theme, many businesses have restricted staff numbers and do not have a marketing function, despite the fact that it would be beneficial to them.

• Provision of a marketing advisor who can be utilised by local businesses to better tell their business story and to connect with the consumer	
Access to commercial funding	The majority of businesses are able to access funding relatively easily, but some have difficulty in doing so. This is caused by a number of factors 1) Most small businesses are started by entrepreneurs, some of whom do not have the skills to develop business plans which enable funding to be sourced. 2) Some small business owners have very little time available, and put little time into sourcing of funding. 3) Some business owners do not know how to approach banks correctly, with correct business planning
Access to business support	Many businesses are financially insecure and the ability to source external grant support can be the difference between effective business development and a stagnating business.

Potential Solution:
- Creation of a banking forum which allows interaction between banks and businesses which are seeking to expand.
- Creation of a service which enables a business to plan effectively and produce a sound business plan which enables access to funding for expansion.

Maximising customer footfall	Several businesses (mainly town based) emphasized the importance of driving town footfall. Many highlighted the drop in footfall through towns as a reason for dropping profitability in many high street businesses.

Potential Solution:
- Councils to create a strategic plan to attract additional footfall into town centres or towards local business centres.
- Planning and holding of local events to attract customers, tourists and other visitors to local areas. These events should be well represented by business, well-advertised, and contain specific attractions which are likely to draw many people.

Barriers to Food Start-Ups

Food start-ups face a range of different challenges to those facing existing businesses. Existing businesses have generally already built sales, have expanded their team and have a range of specialists who can provide support as the business grows further. Start-up businesses almost always lack this capacity and can quickly become overwhelmed by the sheer number of factors or components which have to be controlled.

A range of factors impact the ability of businesses to start and grow. These include:
1) A lack of access to suitably equipped premises in which to start a food business
2) High costs associated with fitting out premises which are not currently equipped for food production.
3) A lack of knowledge about how to scale up a business
   a. Food business registration
   b. Training and certification requirements
   c. Achieving BRC, Salsa or equivalent approval
   d. Achieving and maintaining food safety at higher production levels
   e. Extending food life at higher production levels
   f. Packaging methods and types for distribution to major multiples
   g. Maintaining food traceability

      h. Auditing suppliers for food safety, ethics and sustainability
      i. Adhering to food labelling regulations
      j. Allergen management

In addition, many businesses struggle to access finance, and can have difficulty finding appropriately skilled staff due to the risk associated with working for a small, unproven food business.

Many small business owners also lack connections with other similar businesses and miss out on obtaining feedback and advice from those who are slightly more advanced than they are.

Councils and support organisations can provide assistance and contacts which substantially raise the likelihood of success.

7 Existing Regional Support

Key Regional Support and Representative Organisations

There are a wide range of national and regional supports available to food businesses in the regions studied for this report. Much of the support is overlapping and multi-regional, but some is more specific to council areas. We have outlined our findings in the following section. The information is comprehensive, but it is possible that some supports have been missed, as we discovered that the information on available supports is held across several organisations and sites and there does not appear to be one comprehensive listing of everything which is available.

Council Business Supports

7.1.1 Armagh City, Banbridge & Craigavon Council

Armagh City, Banbridge & Craigavon Council delivered a number of programmes to support business development and growth. These are primarily funded by Invest Northern Ireland, European Regional Development Fund and Armagh City, Banbridge & Craigavon Council. The table below outlines some supports available.

Programme Name	Details
Transform Your Business	To strengthen sustainability in participating micro & small firms and increase their capacity and capability to continually grow by embedding changes to products, processes, technologies or systems. The scheme supports businesses with bespoke one2-one mentoring and a series of best practice workshops that will be free to participating firms in our Borough. The programme focuses on the following elements; • Young Entrepreneurs Support • Early Export Support/ First Steps to Exporting • Digital Transformation Action Plans for Traditional Businesses • Support for Digi- Tech Firms • Social Enterprise Support • Support for innovation
Food Heartland*	The Food Heartland Forum is a unique collaboration between council, local producers, chefs, and stakeholders including Food NI and Southern Regional College who work together to brand the borough and champion local food and drink. The Forum meets once a quarter and membership is FREE – it's a great opportunity to network & keep up to speed with what's happening in the borough and beyond. The only criteria for a business to join is that you must be based in the borough.
Life Science Forum*	The Life Science Forum challenge is aimed at building the knowledge and capability of owner/managers to understand the innovation process and indeed focus that innovation on a growth sector. This forum focused on the Life and Health Sciences sector (including the area of Connected Health) as a growth sector and aims to provide market opportunities to SMEs.
Win More Business Procurement Programme	The programme offers a range of business development workshops, initially with up to 3 days of one-to one mentoring to assist business in key areas such as: • Getting businesses ready to tender • Understanding and identifying supply chain and collaborations • Using e-tendering portals • Achieving compliance with industry standards • Structuring tender submissions • Evaluation of past tender submissions • Contract mobilisation • Employing staff to support new work won

	• Identifying new customer organisations • Raising your business profile with potential customers
Business Improvement District Initiative Key Employment Zone development?	A Business Improvement District Initiative is an arrangement which enables businesses to get together to: • decide what improvements they want to make in their location or business district • how they will manage these • what it will cost them. This all goes into a business plan which is voted on by all those who would have to pay. The BID lasts for a maximum of 5 years and must be able to demonstrate how it benefits the businesses that have funded it.
Mentoring Support to local Businesses applying for Grant Funding	Through this programme small and micro businesses can obtain up to 7 hours of free mentoring support to apply for grants.
Green Economy Support Programme	The Council's Green Economy Support Programme, delivered by International Synergies successfully supported seven local businesses/organisations in 2021/22. Support received included; bespoke carbon reduction action plans, support to access further funding opportunities and support to explore alternative energy sources.
ABC Labour Market Partnership Initiatives including ABC HGV Training & Employment Academy	Fully fund eligible individuals to gain a HGV licence Class 1 or Class 2 and a guaranteed interview, on successful HGV licensing. This is less applicable to the food sector, but it is possible that some food businesses may take advantage of this to train new drivers within their business.
Digital Support Programme	Specialist mentoring to help increase their digital capacity and mobilise digital platforms within their business. Each business selected will receive up to 15 hours of tailored support to help them on their digital growth journey.
Digital Surge Programme	(11 council level) The Digital Surge Programme, part funded by Invest Northern Ireland and the European Regional Development Fund under the Investment for Growth & Jobs Northern Ireland (2014-2020) Programme, helps businesses to embark on a digital transformation journey. The course provides: • 2 half day workshops on the fundamentals of digital transformation and innovation • A diagnostic report outlining an innovation and digital transformation plan for the organisation produced by an innovation consultant • Masterclass workshops to showcase the advanced technologies such as Blockchain, the Internet of Things, Artificial Intelligence / Machine Learning, Data Analytics, Virtual Reality / Immersive Tech and Robotics • 6 days of mentoring support from advanced technology experts • A digital acceleration plan produced for the organisation Routing to more intensive supports and funding.

7.1.2 Causeway Coast and Glens

The available support from Causeway Coast and Glens is listed in the table below:

Programme Name	Details
Alchemy Programme	(80% funded by Invest NI) Free bespoke one-to-one mentoring support from an experienced business adviser, to overcome a business challenge or to exploit a business growth opportunity. 1. strategic business planning 2. business operations, production and logistics 3. customer experience management 4. employment, human resources and staff development 5. environment and efficiency 6. health and safety and risk management 7. ICT and e-commerce 8. innovation, product development and intellectual property 9. export and import trading 10. marketing, sales, networking, social media, promotion 11. finance and cashflow 12. tendering and procurement 13. social enterprise development 14. legal requirements
Digital Causeway Programme	(80% funded by Invest NI) Mentoring support for businesses located within the Causeway Coast and Glens Borough Council area to embrace digital technology and incorporate digital platforms into their business operations and procedures. Participants on the programme will benefit from mentoring support in the following areas: 1. website development 2. social media 3. e-commerce 4. search engine optimisation 5. digital advertising 6. video marketing 7. commercial photography 8. cyber security 9. data and analytics
Tourism Excellence Programme	A sector-specific programme combining one to one mentoring as well as small-group workshops to help the Tourism sector grow
Retail Strive and Thrive Programme	A sector-specific programme combining one to one mentoring as well as small-group workshops to help the Retail sector grow
Activate (post Go For It and pre Alchemy)	Mentoring for those business who fall outside the eligibility of Alchemy, to help them Activate their Go For It business plan
Enterprise Fund	Aimed at new businesses with a track record of two years or less, the fund is designed to maximise opportunities for start-ups and promote future growth.

Town Centre Experience Fund	The Town Centre Experience Fund is about bringing different ideas together and attempting to develop some cohesive thinking around activities which can improve the experience for town centre users. The Fund will open for grant applications, up to a maximum of £4,000 per project and groups of traders/town centre stakeholders will be encouraged to work together to introduce new experiences, activities, marketing or event development within their respective town centres.
Rural Business Development Scheme	(11 council level) The Rural Business Development Grant Scheme aims to sustain and support the development of micro rural businesses across Northern Ireland by providing a small capital grant of up to £4,999 for the business.
Digital Surge Programme	(11 council level) The Digital Surge Programme, part funded by Invest Northern Ireland and the European Regional Development Fund under the Investment for Growth & Jobs Northern Ireland (2014-2020) Programme, helps businesses to embark on a digital transformation journey. The course provides: • 2 half day workshops on the fundamentals of digital transformation and innovation • A diagnostic report outlining an innovation and digital transformation plan for the organisation produced by an innovation consultant • Masterclass workshops to showcase the advanced technologies such as Blockchain, the Internet of Things, Artificial Intelligence / Machine Learning, Data Analytics, Virtual Reality / Immersive Tech and Robotics • 6 days of mentoring support from advanced technology experts • A digital acceleration plan produced for the organisation Routing to more intensive supports and funding.
Business Improvement District Initiative (Coleraine only)	A Business Improvement District Initiative is an arrangement which enables businesses to get together to: • decide what improvements they want to make in their location or business district • how they will manage these • what it will cost them. This all goes into a business plan which is voted on by all those who would have to pay. The BID lasts for a maximum of 5 years and must be able to demonstrate how it benefits the businesses that have funded it.
Taste Causeway	A food network set up by Council to support and showcase the agri-food sector, from farm to fork. Now progressed to become a CIC, that is supported by Council.

7.1.3 Fermanagh and Omagh District Council

The available support from Fermanagh and Omagh Council is listed in the table below:

Programme Name	Details
Kick Start Programme	The Kick Start Programme aims to offer business support to micro micro-businesses throughout the district to increase business survival rates and assist businesses in developing and creating additional employment. The Kick Start Programme targets and supports those businesses which have participated in RSI/ NIBSUP and individuals who have set up in business through other means and have been in business for no longer than three years and provide them with a quicker intervention to enable them to grow as swiftly as possible.
Advancing Business Growth Programme/ Growing the digital economy	The Advancing Business Growth Programme will focus on key areas of development including: • Sales and marketing • Research and development • Exporting This programme will be delivered through a combination of workshops relevant to the needs of local businesses and will provide up to a maximum of three days one-to-one mentoring in areas including sales and marketing, research and development, exporting and growing the digital economy
Tender for Success	This SME Procurement Programme will work with small businesses with little experience or unsuccessful experience of securing contracts through public sector procurement and/or large scale private sector tenders. The Programme will also focus on e-tendering processes to build businesses capacity in using such systems, it will encourage firms to collaborate with other firms to create business networks and to open up the possibility of developing supplier chains and clusters.
Tourism Excellence Programme	This mentoring programme will support up to 20 local businesses operating within the visitor economy. Some food businesses with a tourist focus may be eligible for this.
Website Development Programme	The Website and E-Commerce Development Programme delivers support to more than 25 businesses throughout the district who either have limited or no digital presence to help them set up/ improve their website and/or launch or improve their e-commerce platform.
Digital Surge Programme	(11 council level) The Digital Surge Programme, part funded by Invest Northern Ireland and the European Regional Development Fund under the Investment for Growth & Jobs Northern Ireland (2014-2020) Programme, helps businesses to embark on a digital transformation journey. The course provides: • 2 half day workshops on the fundamentals of digital transformation and innovation • A diagnostic report outlining an innovation and digital transformation plan for the organisation produced by an innovation consultant • Masterclass workshops to showcase the advanced technologies such as Blockchain, the Internet of Things, Artificial Intelligence / Machine Learning, Data Analytics, Virtual Reality / Immersive Tech and Robotics • 6 days of mentoring support from advanced technology experts • A digital acceleration plan produced for the organisation Routing to more intensive supports and funding.
First Saroltop Shop	This programme is available to all businesses within the district including those who do not meet the eligibility criteria of the EU funded programmes. Support is available in a wide number of areas including; • Sales • Leadership

	• Quality Management • Raising Finance • ICT • Export • Recruitment • Financial Planning • Project Management Through targeted and professional support, businesses will be in an elevated position to win new work, increase turnover, improve business processes, develop new business relationships and create jobs to retain skilled local employees
Rural Business Grands	Rural Business Grants are capital grants up to a maximum of 50% grant rate up to £4,999 and are available to existing micro enterprises based in a rural area to support their sustainability, recovery and development through DAERA's Tackling Rural Poverty and Social Isolation (TRPSI) Programme. Applicants are required to attend a mandatory online workshop in order to be eligible to make an application
Enniskillen Business Improvement District (BID)	Enniskillen BID is an initiative where businesses come to gather to decide what improvements are needed in their area, above and beyond those governed by statutory provision. The BID raises funds through a levy which is then used to deliver the projects and initiatives which are set out in the Enniskillen BID Business Plan. Enniskillen BID have three themes which will work to benefit every business and sector in the area: • **Boost Business** will enhance the trading environment through BID supported initiatives and pilot projects to develop business capacity and skills and reduce costs. • **Entice Customers** will promote the towns attributes to key markets. The BID will do this through professional sustainable branding and marketing campaigns, utilising on line technology and social media. • **Enhance Experience** will work to improve the townscape and accessibility into and around Enniskillen.
Social Enterprise Programme	The Social Economy programme is a mentoring programme offering 1-1 support to community groups, voluntary groups, development groups and local charities by supporting them to develop their existing social enterprises or start-up a new social enterprise. The mentoring support available is tailored to the needs of individual applicants.
Labour Market Partnership	The Fermanagh and Omagh Labour Market Partnership (LMP) comprises a core team of representatives from the Fermanagh & Omagh District Council, South-West College, Invest NI, The Careers Service, WHSCT and representatives from industry. The Partnership meets on a regular basis to manage the delivery of the Interim Labour Market Partnership 2021/2022 Action Plan and to develop a 2022/2022 LMP Action Plan. The aim of a Labour Market Partnership is to help improve employability outcomes and labour market conditions locally by working through coordinated, collaborative, multi-agency partnerships, achieving regional objectives whilst being flexible to meet the needs presented by localised conditions and helping to connect employers with employees. The current action plan delivers a range of academies focusing on sectors which are having difficulty in recruiting for example childcare academy, hospitality academy, HGV and Coach driving academy and a welding academy.

Omagh Town Centre Forum	Omagh Town Centre Forum is a network of stakeholders regarding urban regeneration and town centre development matters - not relevant in this section

7.1.4 Mid Ulster

Mid Ulster Council runs a number of programmes to support business growth. The first 5 are part funded by Invest Northern Ireland and the European Regional Development Fund under the Investment for Growth and Jobs Northern Ireland (2014-2020) Programme and Mid Ulster District Council.

Programme Name	Details
Gearing for Growth Programme	To build the capacity, sustainability and growth of 250 micro and small businesses by providing up to 5 days' one-to-one bespoke support to businesses in one or more of the key business areas listed below: • Financial management • Effective Pricing • Accessing finance and investment • Human resources • Social media • Business Planning • Marketing • Routes to exporting • Customer care • Achieve industry standards • Innovation
Tender Ready Programme	To provide up to 5 days' one-to-one support to improve the ability of 130 micro and small businesses to: • Source new work • Prepare and submit live tenders • Identify supply chain opportunities • Use online procurement systems • Achieve compliance with required industry standards
Digital First Programme	To provide up to 4 days' one-to-one support to 150 micro and small businesses to develop their digital capacity, develop digital platforms, improve customer engagement and drive online sales. • Website and eCommerce Development • Social Media Support • Search Engine Optimisation • Google and Facebook Ads • Google Analytics • Cyber Security • Digital Strategy
Transform Programme	To provide up to 5 days' one-to-one support to help 160 micro and small businesses become an 'employer of choice', by implementing tailored and sustainable measures to attract and retain skilled staff, with support including: • Increasing business's attractiveness to the labour market • Develop long term sustainable solutions to recruitment issues • Enhancing business' ability to recruit and retain employees • Develop productive and engaging workplaces • Address areas of skill gaps

Digital Surge Programme	(11 council level) The Digital Surge Programme, part funded by Invest Northern Ireland and the European Regional Development Fund under the Investment for Growth & Jobs Northern Ireland (2014-2020) Programme, helps businesses to embark on a digital transformation journey. The course provides: • 2 half day workshops on the fundamentals of digital transformation and innovation • A diagnostic report outlining an innovation and digital transformation plan for the organisation produced by an innovation consultant • Masterclass workshops to showcase the advanced technologies such as Blockchain, the Internet of Things, Artificial Intelligence / Machine Learning, Data Analytics, Virtual Reality / Immersive Tech and Robotics • 6 days of mentoring support from advanced technology experts • A digital acceleration plan produced for the organisation • Routing to more intensive supports and funding.
Rural Business Development Grants Scheme	The Rural Business Development Grant Scheme aims to sustain and support the development of micro rural businesses across Northern Ireland by providing a small capital grant of up to £4,999 for the business.
Mid-Ulster Social Enterprise Programme	To build the capacity of the sector through the delivery of bespoke developmental support to 40 emerging, new and existing social enterprises. Support includes the following, as a minimum: • Action/Business Planning • Developing a management structure • Marketing/market research • Sector specific issues • Employment issues • Financial management • Assistance to access other sources of support

Other Organisations Providing Support

In addition to the support provided by local councils, businesses in the regions can also access support from a range of other organisations. Again, the support is not categorised in one place meaning that businesses have to search a range of sites and contacts to ensure that they are able to identify all support which may be applicable to their business. The following paragraphs outline the organisations which provide support.

7.1.5 Invest Northern Ireland

Invest NI operates a number of support and advice programmes dependent on what stage a business is at in its development. The organisation aims to

1. Encourage business start-up
2. Enable businesses to operate more efficiently
3. Improve the skills of the staff within existing businesses
4. Develop products and services within existing businesses

The support programmes for business vary on a continuous basis, with new programmes or themes emerging regularly. The current support is available through client business managers in Invest NI. However, the survey of businesses for this programme revealed that only about 35% of businesses were actually registered with Invest NI, meaning that only a minority of businesses are able to access this support.

Invest NI works directly and indirectly with businesses across Northern Ireland. The work of Invest NI is based around the following components. Invest NI delivers the following:

- Provision of information and advice, directly and through a range of information services
- Provision of support to people wanting to set up their own business, as well as assistance for new and existing businesses to grow and move into new markets
- Provision of tailored support to businesses that can make the greatest contribution to increasing productivity, innovation and export growth in Northern Ireland

To become a client of Invest NI a business must meet the following criteria:

- Reach a turnover of £250K per annum within 5 years; and
- Achieve at least 25% of those sales outside of Northern Ireland. This means that businesses which do not export (either to ROI, GB or further afield) are not eligible for support, meaning that any support provided to these businesses has to come from councils, FE colleges or other research and development support.

To access development support a business must demonstrate growth potential as defined below:

- Potential employment growth >= 20% or >=20 jobs within 3 years; or
- Potential external sales growth >=20% or >=£500k within 3 years; or
- Potential increase in GVA / employee >= 20% within 3 years

If a business is eligible to become an Invest NI client there a number of programmes, services and financial support (Grants and Loans) available to businesses at different points of its development.

Support available to Invest NI businesses includes:
- Support around developing the organisational structure of a business
- Develop products and services
- Develop strategy
- Find funding
- Find new markets
- Operational efficiency including ICT support
- Skills Training
- Export Development

Invest NI operates a number of support and advice programmes dependent on what stage a business is at in its development. The support programmes for business vary on a continuous basis, with new programmes or themes emerging regularly. However, the survey of businesses for this report revealed that only 37.2 % of businesses were actually registered with Invest NI, meaning that only a minority of businesses are able to access this support.

7.1.6 Local Further Education Colleges

All the local colleges in the MSW and Causeway Coast and Glens region support local businesses in innovation, business development and skills training. The local colleges include;

- Southern Regional College
- South West College
- North West Regional College
- Northern Regional College

The main challenges identified by colleges for Agri-Food businesses include:

- o Digital, Online, Ecommerce, Data and Robotics
- o Hospitality Staffing, Skilled Food Scientists, MPD skilled workers,

The main skills gaps identified include

- o Digital Skills
- o Skills to implement data management and use of robotics

The geographical arrangement of the colleges means that four colleges cover the regions in the study. They all offer similar, although subtly different services. The business Support and Innovation teams within the colleges offer

- Training Needs Analysis to establish skills gaps
- Tailored training solutions specific to business,
- Funded Support
- Online and blended training programmes in a range of areas

In general, the colleges offer the following training support to the food industry.

1. Payroll
2. Digital Marketing
3. Adobe
4. Excel (Basic- Specialist)
5. Health and Safety Courses
6. Food Safety and Hygiene
7. Restaurant Ready
8. Barista
9. Leadership and Management

It is important to recognise however that the colleges are only really permitted to provide subsidised or free support as individuals work towards a qualification, restricting what is on offer. They offer practical support for business through R&D projects, industry mentoring, specialist knowledge transfer & training services. For the engineering industry colleges offer expertise in the following areas, and these are also applicable to the food sector.

- Process Design and Manufacturing
- Product Design & Development
- Plant Maintenance
- Lean Manufacturing
- Mechanical Engineering
- Electronics & Robotics

In general the outline of support offered to businesses includes

- Bespoke Support offered to SME's in general.

- Other bespoke work for with larger businesses whilst charging commercial rates.
- Dedicated Business support unit (Core team of 6 overseeing specific areas, and part time specialists), Academics and Lecturers are used if needed
- The Business Support unit helps businesses develop Processes, Product Development, Innovation & Scaling up
- Funding from Department of economy (Less than 50 employees)
- Innovation Vouchers (Up to 250 employees)
- Bespoke work with companies etc (Trailers correction for example)

7.1.7 Labour Market Partnerships

Employability NI is the Department for Communities (DfC's) new approach to providing support services for unemployed individuals seeking to get back into to work. Rather than a stand-alone programme, it is a series of interventions that will evolve over time, as legacy programmes come to an end. It is intended to be a cross governmental approach to co-designing and co-commissioning (including with local government) a sustainable future strategic employment offer which provides a tailored level of support proportionate to need. It has been designed in order to:

- Deliver a reduction in economic inactivity and long-term unemployment to bring NI closer in line with UK rates.
- Provide increased support for those with health conditions (especially mental health) and disabilities.
- Create a mechanism for government to collaborate with Councils and other Departments to offer local solutions.

Labour Market Partnerships (LMPs) are a key aspect of Employability NI and each Council area will have its own LMP consisting of key stakeholders, business and community representatives who will work collaboratively to secure funding to deliver local solutions to help local people who are unemployed to get closer to work or back into work in the local economy.

Labour market partnerships may offer a good opportunity for the council to enable business to tackle specific skills and labour challenges in the agri-food sector.

7.1.8 College of Agriculture, Forestry and the Rural Economy (CAFRE)

CAFRE provides a wide range of rural business supports, including information for farms and food businesses. CAFRE have a team of technologists who work with over 250 businesses annually across a range of food production sectors. The team works with businesses to encourage innovation, promote the adoption of technology and to deliver a comprehensive range of accredited training courses.

The technological development and support programmes are tailored to meet the needs of individual businesses and the industry as a whole and the team works with small to large businesses, from start-ups through to multi-national companies.

The agricultural support provided includes technical advice and training for a range of production sectors, as well as business management advice. CAFRE is also starting to develop and grow a team to provide advice around good environmental practice.

7.1.9 NI BusinessInfo

NIbusinessinfo.co.uk is a free service offered by Invest NI and is the official online channel for business advice and guidance in Northern Ireland. It contains an extensive set of online resources which can be used by business, including:

1) Business support finder
2) Case studies
3) Template guides on contracts and HR etc.
4) Advice and guidance

7.1.10   Northern Ireland networks for all businesses

Most businesses can find some benefit from joining a business network in Northern Ireland. From simple best practice advice to networking for trade opportunities, there are business organisations in Northern Ireland ready to make those business connections possible.

- The **Northern Ireland Chamber of Commerce** offers a range of business services and networking events to promote business development.

- The **Confederation of British Industry** has its own business networking programme and runs a wide number of events which provide information and knowledge for business.

- The **Federation of Small Businesses** offers members local newsletter updates, access to legal and tax information as well as Northern Ireland business networking events.

- The **Rotary Club** provides business networking opportunities with a number of local offices across Northern Ireland.

- **Women in Business** claims to be the leading business network for female entrepreneurs, women in the workplace and business leaders across Northern Ireland. The organisation runs a range of business and personal development events.

- **Young Enterprise Northern Ireland** is a support organisation which provides assistance to young people who want to start a business.

- **Catalyst CONNECT** is an independent not for profit organisation which works to create a community of like-minded innovators to drive knowledge development and exchange in Northern Ireland. The organisation is working with a range of organisations to establish Belfast as a globally significant destination for innovation, and is in a position to provide advice to business.

Specific Support Areas

7.1.11   Industrial Strategy Challenge Fund (ISCF) from Invest NI

The ISCF is open to companies from Northern Ireland and financial support for research & development of commercial solutions which overlap with Industry 4.0 solutions. Working together the Government, businesses and academics have identified the biggest core industrial challenges where the UK has a world-leading research base and there is a large or fast growing and sustainable global market. These challenges have been aligned to the four 'Grand Challenges' set out in the Industrial Strategy White Paper. The grand challenges are:
- Artificial Intelligence (AI) and the data economy
- Clean growth
- The future of mobility
- Meeting the needs of an ageing society

Invest NI can help to identify the most appropriate ISCF funding call, provide financial support for preparing an application, advise on funding rules, regulations and eligibility criteria. Assist businesses to find the right partners through, for example, the Enterprise Europe Network (EEN) and the Knowledge Transfer Network (KTN). Signpost businesses to further specialist events and advice providers.

7.1.12   KTN – 4Manufacturing (Northern Ireland)

KTN are working with a small cohort of regional partners to test and refine the 4Manufacturing approach and the digital tool for market, through capacity building of the business advisors in the region. One of the early partners are Invest NI, who are working with SME manufacturers to help them adopt digital technologies in their quest to align with the objectives of Industry4.0. The 4Manufacturing tool has been focused on manufacturing businesses in

Northern Ireland to improve their productivity and their overall competitiveness against businesses across the whole of the UK, and this is now being trialed in the Food Sector.

7.1.13   AMIC – The Factory of the Future – Queens NI

Responding to the needs of industry, Queen's has led a proposal within the Belfast Region City Deal (BRCD) to establish Northern Ireland's own Factory of the Future. The Advanced Manufacturing Innovation Centre (AMIC) is a proposal that will establish a new facility that will integrate all the streams of manufacturing and materials technology development within Queen's. It will provide a collaborative working space in which the latest IDTs can be deployed for experimental and pilot-production purposes. AMIC is being established to integrate with UK and international digital manufacturing initiatives to act as a connector to the UK's High Value Manufacturing Catapult centres. It is intended to support local companies in accessing innovation funding, particularly under Industry 4.0 programmes flowing from the UK's Industrial Strategy. The capabilities of AMIC will be shaped to ensure that Northern Ireland is strategically placed to address the challenges, while exploiting the opportunities afforded by Industry 4.0.

7.1.14   Things Connected Service NI (By Digital Catapult)

This is a programme led by Ulster University which invites SMEs to make use of the Things Connected Internet of Things (IoT) network to tackle long-standing challenges. Things Connected NI is delivered by a consortium of partner organisations including all of the councils in Northern Ireland and a number of the country's leading private sector industry technology experts and business leaders. The low power, wide area network (LPWAN), which covers the whole country and is free-to-use, enables SMEs, makers and researchers to develop IoT solutions that need to communicate with services across large geographic areas while using the least amount of energy possible. The programme is supported by Ulster University's world-leading research in connected health and data analytics. It has also developed a new IoT Masters programme to respond to the emerging importance of careers in the field across all sectors.

7.1.15   Digital Catapult (NI)

Digital Catapult Northern Ireland connects industry and academia to build innovative partnerships, helping organisations of all sizes to work smarter by originating and adopting advanced digital technologies and is intended to accelerate the adoption of emerging technologies for commercial benefit. It has a wide network of collaborative partners across multiple technologies, supporting knowledge transfer and creating opportunities for local companies. Working closely with Invest NI, the Department for the Economy and FSNI, Digital Catapult Northern Ireland introduces businesses to new possibilities by sharing use cases that demonstrate how emerging technologies are being deployed in industry.

It helps businesses to leverage the opportunities being presented, particularly by artificial intelligence and immersive technology.

- Through the Immersive Lab, startups, scaleups and organisations of all sizes can experience the latest immersive technologies, including virtual reality and augmented reality. This space can also be used to demonstrate and test their own immersive content.
- Through the internet of things (IoT), organisations can gather and process data, which can then be analysed using artificial intelligence to deliver key insights.
- Businesses can also apply to join the Digital Catapult Machine Intelligence Garage programme, which opens a global door to accelerate their AI capabilities and ambitions.

A report by Deloitte on Industry 4.0 in 2015 made some comments which are still highly relevant:

"Machines are moving from collections of separate devices to singular collaborative networked systems which can accept and communicate data allowing for operational improvements to occur both automatically, or through user intervention"

and

"Manufacturers will not only need to attract employees who are comfortable and skilled to operate new technologies, but will face increasing competition for data scientists and database managers skilled in interpreting and leveraging intelligence from new data streams. Manufacturers will also need to identify entrepreneurial talent internally and externally to work in emerging, dynamic business environments considering opportunities holistically across the business, and be prepared to act outside of traditional organizational silos."

It is important that support is provided which allows our companies to develop both their factory floors and their employees.

Penetration and extension of this support.

During the research for this report we contacted a range of organisations to understand the uptake of the offered business support. What we discovered was that at council level there appears to be very limited recording of the level of uptake of business support. The individual colleges were able to confirm the number of businesses which they supported and/are currently supporting, but are unable to release the names of these businesses.

Invest NI keep good records of the businesses they support and the supports which they deliver. Their client managers keep regular contact with client businesses and are able to provide tailored support. However this is only targeted at businesses which have specific growth targets and which are aiming to export at least 25% of their production. Invest NI are also unable to release the names of the business which they support due to data privacy.

The Regional Colleges provide a good range of support and keep records of the businesses which take up the support. They are also able to give outline numbers of the business support which has been provided, but are not able to be specific about individual companies or the support which they have received. As an example, Southern Regional College (SRC) reported that 107 businesses received specific food innovation/product development support (one-to-one tailored support) from them in the last 3 years. In addition, SRC delivered 227 projects in accredited training to the agri-food and food service industry focusing on some or all of the following: food safety, customer service, leadership and management, IT training, NEBOSH, Allergens, food industry skills and performing manufacturing operations. Other colleges carry out similar types and level of support and training.

Each of the individual support providers keep records of training, but these are not made public and as a result there is no easily accessible overview of the training which businesses need, what training businesses take up, what support is most effective and which specific businesses are and aren't taking up support.

There is a clear need for joining up activity in the area of support and training. There is potential to create an official forum in which all support providers can regularly meet to coordinate activity. Councils can have a significant role in enabling improved communication and coordination.

Potential benefits which could be brought to the target regions

A range of benefits will be delivered;
1) Better identification by the council of the needs of business
    a. Specific targets around business understanding
    b. Constant feedback to council around business need

2) Better connection between council employees and local businesses
    a. Targets around business interaction and feedback
    b. Targets around focused business development
    c. Measurement of uptake of training and support

3) Raised business performance through
    a. Increased data collection and utilisation by business
    b. Upskilled staff who are able to deliver higher levels of performance
    c. Better invested businesses which have higher productivity

4) Business growth in the target regions.
    a. Business start-ups
    b. Business expansion
    c. Job creation
    d. Higher value jobs

Good practice which enables the solutions to be effectively implemented

A summary of the general good practice which enables the solutions to be effectively implemented are as follows;
1) Clear targets set and agreed
2) Effective communication links
3) A clear understanding of business need
4) Identification of appropriate solutions to the identified challenges
5) Identification and appointment of appropriate individuals to address each target
6) Clear timelines
7) Appropriate resource
8) Clear milestones and intended outcomes from each of the proposed solutions
9) Clear communication structure

7.1.16 Redditch Borough Council example

Redditch Borough Council have outlined proven principles for partnership working and have produced a 'toolkit' to guide interaction:
- The Council is clear about the purpose and expected outcomes of the partnership for the people of the Borough when entering into the partnership
- The Council's own agreed priorities and objectives are being met;
- There is clarity and shared understanding about the role of each partner and their accountability and responsibility for outcomes;
- Performance of the partnership's activity and outcomes is monitored, reported, reviewed and evaluated to make best use of resources;
- Risks for the Council and the partnership are assessed and agreed;
- Each partnership maintains a relevance to its agreed purpose during its lifespan and an effective exit strategy is in place;
- The partnership is properly empowered and its legal status understood;
- Reviews are undertaken to evaluate success, challenge progress and improve effectiveness.

They state that the word 'partnership' is increasingly used in the public, private and voluntary sectors and can mean different things to different people. RBC defines a partnership as a joint working arrangement where the partners:
- Are independent bodies
- Agree to cooperate to achieve common goals and outcomes for the community;
- Plan and implement a jointly agreed programme
- Share accountability, risks and resources;
- Create an organisational structure with agreed processes and programmes.

Microsoft Word - Item10PartnershipGovernanceAppendix10.doc (redditchbc.gov.uk)

Review of National and International Best Practice linking producers to retail and restaurants

The main aims of food development programmes are to increase the sales of food products, locally, nationally and internationally. The approach to development differs depending on the target market, with multiple retailers requiring a completely different approach to local speciality markets or restaurants.

Smaller producers regularly report that one of the key factors restricting business growth is knowledge. The idea of supplying a large retailer or other higher volume or higher specification food businesses can be intimidating, and many small businesses fail to bridge the gap because of a lack of knowledge or lack of confidence. This is not usually the case for larger more established businesses, as they tend to have a range of people with different skills and specialist knowledge.

Small food businesses tend to be the engine room which drives development as they tend to arise in response to an identified demand (which is usually niche). They generally have low staff numbers (often only one or two staff) and are highly focused on practical production, with little time to learn or carry out sales development. This often means that the businesses stay small, despite their undoubted potential.

In reality most small businesses are likely to remain small, but Northern Ireland as a whole is littered with success stories about food businesses which have grown from very small beginnings to become large national and international organisations. The more small businesses which start and succeed, the more likely it is that larger businesses will develop, delivering employment and significant economic benefit to the regions in which they base themselves.

This is not to say that small businesses are not important. They are, and the figures shown elsewhere in this report show that small businesses in general (not just food businesses) with less than 9 staff employ over 110,000 people in Northern Ireland. If the size of the company is increased to include those with up to 50 staff, well over one quarter of the workforce in Northern Ireland are accounted for. As a result, the creation of conditions which enable small business growth is critical to the future success of local council economies.

7.1.17 Summary of best practice ideas

The principles for development of food production are well established and proven. These are as follows;

1) Effective communication methods established between business and industry.
2) Identification of the key challenges being faced by food businesses at local and national levels
3) Design of programmes which are aimed at addressing these challenges.
4) Apportionment of resource to address the challenge
5) Generation of partnership working between councils, support organisations and industry
6) Generation of networks to exchange knowledge and deliver events

7.1.18 Specific topics

There are a range of topics which, across a range of regions have enabled effective business development.

1) Development of really effective communication database and practices to communicate with businesses
2) Upskilling and investment around the collection, management and use of data to improvement business productivity and sustainability
3) Creation of events to showcase producers to commercial buyers and the buying public
4) Creation of events to generate additional footfall in local areas to draw people into town centres and retail areas
5) Development of marketing and promotion plans

7.1.19 Key shared components for market success

Whilst markets differ substantially, there are several shared approaches which are appropriate for every market:
1) **The requirements of the customer must considered** and the product must be designed and built against those requirements.

2) **Methods of accessing the customer must be considered**. National supermarkets will require national distribution to central distribution hubs. Speciality food sales may require distribution to geographically widespread delis and speciality retailers. Some specialist producers may simply sell to local markets, and the product offering will be very different.

3) **National distribution to a major multiple will require the ability to produce large volumes of product rapidly** and to very specific delivery points. The company will need to be highly responsive to varying level of demand, and be able to meet the promotional needs of the retailer

4) **Generation of marketing messages** which include the attributes of the product, the benefits of the product, the story behind the product.

7.1.20   Retail Development Programmes

Retail programmes are focused on identifying small producers and enabling them to grow to meet the volumes requirements whilst meeting the required quality specifications. A range of programmes exist, all similar but with different characteristics.

Lidl Kickstart Programme (Lidl and Northern Ireland Food & Drink Association)
The Lidl Kickstart programme has been running since 2017. If has been developed in conjunction with Bord Bia. Its intention is to give Irish food and drink suppliers the ability to showcase their products to Lidl and to grow their business right across Ireland. Lidl have invested more than €6 million Euros into the programme and have supported over 350 Irish Food and Drink suppliers. Currently the programme has enabled more than 500 products to be launched into Lidl stores.

The Lidl Northern Ireland Kickstart Programme is designed to help small and medium-sized local food and drink producers grow their brand, build their supply network and reach new customer audiences, upping their potential to open up new export opportunities. The programme essentially enables small suppliers to work alongside Lidl staff to understand the needs of Lidl and receive advice and assistance as the company adjusts and gears up to ongoing supply into store.

ROI- Food Academy Programme (SuperValu, Bord Bia and the Local Enterprise Office)
To help develop Ireland's artisan food industry, the Local Enterprise Offices, SuperValu and Bord Bia joined forces in 2013 to create 'Food Academy' – a tailored programme for early to mid-stage food business owners. The Food Academy is a training programme aimed at supporting and nurturing start-up food businesses. The Local Enterprise Offices work with Bord Bia and SuperValu on this initiative to provide a consistent level of food marketing knowledge through workshops and other training sessions to new and early-stage food business owners.

At the final workshop, participants will get the opportunity to present their product to a panel from SuperValu and if successful, can participate in a trial based in local shops, which in the right circumstances, could progress over time to a national listing with SuperValu.

Programme Objectives
- Develop an in-depth knowledge of the tools which can be used to assess market gaps for your product
- Understand core technical issues facing your food or drink business
- Learn how to grow sales for your product range through better branding and packaging design
- Gain all the tools and knowledge necessary to launch and build a successful food business in Ireland

7.1.21 Food and Drink Networks

Food and Drink Networks are proving to be central in linking local producers to retailers and hospitality. The purpose of Food and drink Networks is to provide a collective regional representation and voice to local producers. Activities run by networks include food and drink fairs, networking events and training workshops.

The aims of food networks differ substantially, with some focused on business promotion, others focused on increasing tourism and still others focused on sharing knowledge between businesses to enable business improvement. The best networks achieve all three of these aims, and Ireland and the UK have some of the most effective food networks. The following paragraphs outlines various networks which are in operation across the UK and Ireland.

'Taste of the West' (South West England),

Taste of the West is the largest independent regional food group in the UK and it aims to promote and support local food and drink from Cornwall, Devon, Dorset, Gloucestershire, Somerset and Wiltshire.

The aim of the network is to champion food and drink producers in the West Country, as well as the places that serve and sell them. It aims to demonstrate the quality of food in the South West. Taste of the West runs an annual awards scheme to ensure high standards are maintained. Members of the organisation include food and drink producers, distributors, restaurants, cafes, pubs, hotels, farm shops and specialist retailers. The network has been operating since 1991, and continues to focus on quality, integrity and provenance.

Communication: The organisation has developed a very strong online presence which lists premises where South West food is available. The organization's patron is H.R.H Prince Charles Prince of Wales and there are five different levels of membership and they currently have 1100 members:

1. Producer
2. Hospitality
3. Retail
4. Wholesale
5. Affiliate – they currently have over 100 affiliate members providing professional or supporting services

They celebrate their members extensively and have a very wide range of awards which they use to promote and encourage their members.

1. Best place to go
2. Supreme champion product
3. South West Food and Drink Innovation
4. South West Producer of the Year
5. Best Newcomer
6. Best Branding
7. South West Environmental Sustainability Award
8. Best South West hotel
9. Best South West restaurant
10. Best South West dining pub
11. Best South West casual dining
12. Best South West local food to go
13. Best South West butcher
14. Best South West farm shop

Wicklow Naturally (County Wicklow, Ireland)

Wicklow Naturally is a food network which was established in 2019 by a group of 12 producers in conjunction with the local council and County Wicklow partnership. The organisation took a very proactive and structured route to development, and, over a three year period have developed the organisation to include approximately 100 businesses including farms, food producers, food service, hospitality and tourism focused organisations. The network has appointed two coordinators, have a structure which includes activity planning committee, finance and membership

committee which report directly to the governing board. The network produces an annual activity plan, as well as a communication plan and deliver a wide range of events or actions during the year including attendance at shows, markets, the creation of publicity events, meet the producer events etc.

The Wicklow Naturally network has a label which identifies food from the network and local retailers report a dramatic increase in sales as a result of the label, with identical labelled products selling at up to three times the rate of identical unlabelled product.

Wicklow Naturally is an example of good practice in that it creates a forum where food businesses can work in partnership with the County Council, Wicklow Tourism and other organisations to benefit food producers in particular and the county in general. The network has seen good involvement from a wide range of businesses, the creation of events which draw visitors from inside and outside Wicklow and the structured communication of the value of high quality local food.

Boyne Valley

Boyne Valley Flavours initially began when a group food producers and hospitality providers came together to support and promote the local food offering across the region. Since then, the movement has grown significantly and in 2013 the Boyne Valley Food Series was born, a unique calendar of events to promote the sector. The network has enabled businesses to build a wide range of connections across the industry, has opened up new sales opportunities, and has enabled businesses to share information and support.

Food Coast Donegal

Food Coast Donegal was developed to encourage and facilitate the establishment of new food opportunities in the county, while at the same time increasing the capability of existing food enterprises and food promoters within Donegal. It has become central platform for establishing Donegal as a "Food County" – a place with a vibrant food culture and food economy. The network provides support to businesses in the food sector and informs them about the programmes, training and events being rolled out by the agencies tasked with supporting and growing the industry. The programme continues to be a key area of focus for the Local Enterprise Office in Donegal and the actions and activities outlined the strategy and review of the strategy in 2016 are ongoing. The Donegal Food Strategy is overseen by a steering group which is represented by stakeholders and businesses from the food sector:

BIA Innovator Campus

BIA Innovator Campus is a highly advanced project that is intended to transform the food entrepreneurship landscape in the West of Ireland. The facility is co-located at the Teagasc campus in Athenry, and is intended to address the key need for regional food workspace infrastructure and support services, It is attempting to create a bundle of food production units and co-working kitchens, to enable learning and innovation in one location.

Bread and Jam Ireland

Bread and Jam Ireland is located within the BIA Innovator Campus. It is focused on delivering focused community and learning forum for food and drink entrepreneurs. Bread and Jam is a focused food enterprise network which is intended to accelerate development and brand building community, for the West of Ireland and nationally.

The Bread & Jam food and drink initiative has already been proven in the UK. There, the online FOODHUB community has over 11,500 members and is a vibrant hub which enables the scaling of emerging and existing food & drink brands. Bread & Jam Ireland have launched a series of unique industry events focused on helping Irish food and drink entrepreneurs accelerate the growth of their ventures.

Cotswold Taste

Cotswold Taste is a food network which aims to develop food business. The network is interesting because it offers different types of membership:

1) Full Membership for businesses involved in the actual production, processing, supply and retailing of products that qualify to carry the Cotswold Taste brand, and for hospitality outlets offering specific products which qualify to carry the Cotswold Taste brand.

2) Business Partner Membership For organisations and individuals who are able to promote and support Cotswold Taste, such as the range of 'support' organisations which are necessary to their business operations (e.g. accountants, law firms, real estate partnerships, PR and marketing consultancies, specialist service providers, and funders); and public sector and other organisations that procure Cotswold Taste products, or adopt and implement policies relevant to Cotswold Taste's objectives.

The organisation focuses on coordinating business and promotional activity.

7.1.22   Creation of Food Parks

Food Valley of Bjuv
The Food Valley of Bjuv is a cluster where entrepreneurs and innovators can get together to develop the future of food production and enable food companies to thrive. The concept enables networking and cooperation between research, entrepreneurs and industry and focused on meeting future consumer and market demand. The cluster studies sustainable food production, onshore fish farming, greenhouse cultivation, extraction of vegetable protein, innovative packaging industry, development of related supportive industry and operates a green impact industry park.

Food Enterprise Park, Norwich
The Food Enterprise Park is a 100-acre site which has been established near Norwich which offers space for established and growing companies working in agri-food, agri-tech and related industries. The facility is a partnership between Norfolk County Council, South Norfolk District Council, Broadland District Council and the New Anglia LEP. The site benefits from a Local Development Order (LDO) designed to support sustainable growth of the county's agri-food sector.

The LDO grants planning permission on the first 46 acres for specific development related to the food industry, meaning that it is not necessary to submit planning applications for proposals. This considerably fast-tracks the development process. They state that crops worth £1 at the farm gate are worth £5 in added value at first stage processing in the supply chain and that they want to keep more of that value in the region.

7.1.23   Creation of Food Hubs

Food hubs are entities that sit between people who produce food and people who eat it. Hubs function as points where specialist food can be aggregated and distributed. Hubs can fill gaps in local food infrastructure, helping local consumers to access local food. Food Hubs can play a part in alleviating food poverty and improving the diet of consumers in general. Food hubs with a sustainable focus can apply standards to support sustainable production and can provide an appropriate route to market for sustainable producers and produce.

They can fill gaps in local food infrastructure, help consumers find locally sourced produce, support new forms of food retail, incubate food enterprises, or create a space for community education and action.

Food Hubs can operate from a range of facilities, whether stand-alone or as a component within an incubation or nesting facility.

7.1.24   Food Clusters
Food clusters are a geographic concentration of interconnected companies, including food producers, specialist suppliers, service companies and support agents. In a cluster, food industry companies do not act like direct competitors to one another, instead working to create possibilities for mutual trust and cooperation. Food Clusters are difficult to initiate without the building of strong relationships. A cluster initiative is a highly effective instrument

to detect and implement winning strategies between companies and agents that form part of the same value chain and which share common challenges.

7.1.25   Coordination of development programmes for business

Our research showed that there is a very large range of business support available to businesses in the various regions. The most significant challenge appears to be ensuring that businesses are aware of the support which is on offer, and ongoing monitoring of the uptake of the support:

8 Recommendations

Recommendation 1: Create comprehensive, effective communication and record keeping within each council region

Reasoning

Our experience of obtaining communication details to engage with business identified a key challenge around the identification and holding of contact details for each businesses. Information held by the respective councils was often accurate around the name and location of the businesses, but proved less than accurate in terms of email addresses. It's also important to note that two businesses identified appeared to have ceased operations without the Council's knowledge.

Even more importantly, there was a lack of information around the key contact people in each business, and where email addresses were available, they often were simply the info@.... address which was often not monitored meaning that the email was not actually read or passed on to the appropriate person or ignored. On many occasions, the Team tried phoning businesses to make contact which proved time consuming. This is inappropriate for important, wide-scale communication from the council and must be addressed.

We have also found that records around the uptake of support in council areas are not coordinated and often incomplete, potentially reducing coordination and effectiveness of support as well as barring any analysis and follow up on how the support was received, how well the business performed afterwards and any benefits of the support to the local economy.

We have also found that either the communication of available support to businesses, or the way in which businesses receive the information means that information around the support landscape is disparate and difficult to obtain.

Action 1: Maintain a fully up to date communication database

Implement resource in each council area to create and maintain a fully up to date communication database for each area which includes;
1) Clear description of business
2) Main contact personnel within each business
3) Email addresses and phone numbers for main personnel in each business.

Action 2: Maintain records of uptake of support

Implement resource to maintain easily accessible records of the uptake of training and support of all food businesses in each area. This includes support provided by:
- Council
- Invest NI
- Colleges
- Other training providers

Action 3: Work together cross-departmentally and with local and national support organisations and, if appropriate, other councils, to signpost and deliver targeted business support in each region

Much good work is already happening around business support, but the landscape is often confusing and available supports are often hidden. There does appear to be some duplication of work between councils, colleges and Invest NI, and the appointment of a person to coordinate and deliver coordination and sharing of information can raise the effectiveness of support delivery.

In addition, councils should focus on improving internal cross-departmental working between environmental health, planning, building control, tourism and economic development with regards to the provision of support to the agri-food sector and potential food entrepreneurs

Action 4: Create a highly focused rolling communication plan which guides council interaction with business

Create a communication plan which is delivered across each council area which is focused on communication of;
1) All available support for food businesses in each council area.
2) All events which can be used to promote food businesses in each area.
3) Business networking events

Programme Costs

The above four actions can be delivered through a combination of dedicated personnel and joint working with other businesses and organisations. We believe that a central dedicated resource (with some backup support) can deliver the creation and maintenance of an contact database, as well as the creation and maintenance of a database which records available training and support, the take up of training and support and any gaps in provision. The lead person responsible will also feed into the rolling communication plan. We estimate the costs of the programme to be as follows:

1) Provision of a resource which is fully dedicated to the creation and maintenance of communication databases, record keeping around uptake of training and support, as well as analysis of the information and identification of future actions. Estimated cost: £44,000 per council area.

2) Provision of support staff to provide assistance and cover during absences: £15,000 per council area.

   Please note that these costs are shared with Recommendation 2.

Possible Collaboration Partners

The following organisations have been identified as potential collaborators for delivery of Recommendation 1:
- Invest NI
- FE colleges
- External training providers
- CAFRE
- UFU

Recommendation 2: Ensure Joined up working between the Council, Invest NI and other connected organisations

Reasoning

During the delivery of this report we identified that it is not always easy to be aware of the full range of support which is available to business. This is a particular problem with small business, with many small food business owners being too busy to have time to effectively identify appropriate support.

Action 1: Where not already in place, each council to designate a specific role or partial role to facilitate joint working between key organisations and business

Councils to appoint one specific person per council area whose sole responsibility is to

1) Identify all business supports which are available within their council area. This includes support from local council, Invest NI, or support available from other sources. These will include (but are not limited to) finance, marketing, technical or training
2) Ensure that the business supports are posted on the council website, social media pages, newsletters and where appropriate communicated directly to businesses through networks and direct communication
3) Ensure that business support team are aware of all supports available, where to access them, eligibility criteria etc.
4) Ensure that communication of the business supports is highly effective both externally and internally.
5) Ensure that the information available is always accurate and up to date
6) Ensure that information seminars are regularly run (both externally and internally), and that recordings of the briefings are widely available to food businesses in the council area.

Action 2: Where not already in place, each council to create a business development forum which enables council to engage with other relevant support agencies to ensure that businesses are receiving all the support they require

Create an official development forum between the council, Invest NI and FE colleges. This forum would meet quarterly and would share the following information:

1) Business performance in the regions
2) Business training requirements
3) Available and emerging support for business
4) Business support delivery by each organisation in the specified area
5) Emerging and unaddressed need
6) Potential funding sources
7) Review of progress of any joint work and decision making about future steps

The forum should include a mix of virtual and physical meetings and should include a biannual workshop which enables all agencies to present the work they have been delivering, and to discuss, plan and apportion research.

Programme Costs

The programme costs for each council area include the following:

1) Provision of a resource which is fully dedicated to the creation and maintenance of communication databases, record keeping around uptake of training and support. Estimated cost: £44,000 per council area. Please note that this cost is shared with Recommendation 1.

2) Provision of support staff to provide assistance and cover during absences: £15,000 per council area. Please note that this cost is shared with Recommendation 1.

3) Provision of resource to enable the creation and continual updating of a communication plan which structures and delivers the communication between each council and the farm and food businesses in their area. £20,000 per council area.

Possible Collaboration Partners

The following organisations have been identified as potential collaborators for delivery of Recommendation 2:

- Invest NI
- FE colleges
- External training providers
- CAFRE
- UFU

Recommendation 3: Create a programme which supports all food businesses to collect and use data and to implement automation

Reasoning
The majority of businesses contacted during the research for this project were clear that they did not collect, analyse and use adequate amounts of data to fully develop the productivity of their businesses. In addition, other information collected showed that approximately 40% of food businesses were struggling to obtain enough appropriately skilled staff. This challenge is likely to grow and it is becoming increasingly important for businesses to gather the information to continuously improve their performance and sustainability.

Description
Multiple commentators agree that businesses in Northern Ireland share a number of strengths and weaknesses. The findings have been highlighted earlier in the report, but the single largest challenge is around data collection and use for management. Some businesses in our surveys and interviews were content with the level of data collected and with how they use it. However, the overwhelming majority of businesses engaged with indicated that data collection and analysis in their business was below ideal.

A number of components underpin this low level of data collection, with availability of staff time, lack of automated collection on the farm or on the factory floor, the lack of interoperable software packages to aggregate data, or, in particular, the lack of understanding of the value which appropriate data collection and use can bring to a business.

Action 1: Create a focused business training programme to accelerate the collection and use of data for management. This programme should include non-exporting as well as exporting businesses

Create a focused business training programme to accelerate the collection and use of data. The programme should involve a range of delivery organisations, facilitated and assisted by council staff. The package should involve the following components:

- Identification of case studies which show how a range of businesses have implemented appropriate data collection and use, with clear steps to implementation and use, as well as clear outlines of the business productivity and profitability which has been driven by the system.

- Identification of business or site visits which will allow business managers to view appropriate systems in operation, demonstrating 'what good looks like'

- Identification of a range of support organisations and commercial businesses which can enable farm and food businesses to implement, use and maintain effective data collection and analysis systems.

- Linking of solution providers to identified challenge.

- Identification of user-friendly data collection systems and methods which can be used in small, medium and larger businesses.
  - Measurement and improvement of productivity
  - Measurement and improvement of sustainability

Action 2: Intentionally focus on a culture of business improvement
Intentionally focus on the development of a culture of business improvement through the development of a communication plan which regularly contacts businesses with targeted and useful information which changes mindsets over a period of time.

- Creation of contact databases with identifiers for each business type, size, development needs, training required etc.

- Creation of a communication plan which clearly identifies messages and timelines for communication to businesses and should include the use of case studies, ideally from local businesses who have made changes and seen benefits.
- Apportionment of staff resource to manage the overall delivery of the plan.
- Identification and engagement of external organisations which can assist with the design and delivery of the communication programme.

Action 3: Create a programme which supports all appropriate food businesses to implement automation. This programme should include non-exporting as well as exporting businesses

Create a focused business training programme to accelerate the implementation of automation on the factory floor. The programme should involve a range of delivery organisations, facilitated and assisted by council staff. The package should involve the following components:

- Identification of case studies which show how a range of businesses have implemented appropriate automation, with clear steps to implementation and use, as well as outlines of how business productivity and profitability which has been driven by the system.

- Identification of business or site visits which will allow business managers to view appropriate systems in operation, demonstrating 'what good looks like'.

- Identification of a range of support organisations and commercial businesses which can enable farm and food businesses to implement, use and maintain effective robotic and automation systems.

- The linking of solution providers to businesses with identified challenges.

- Identification of user friendly robotic and automation systems which can be used in small, medium and larger businesses.

Action 4: Councils to engage with CAFRE to ensure that there is collaborative working with Labour Market Partnerships to ensure that the skills agenda is met

Ensure that focused skills training is available to accelerate the implementation of data collection and automation on the factory floor. The programme should involve a range of delivery organisations, facilitated and assisted by council staff, but should ensure that there is joint working between CAFRE and Labour Market partnerships.

Ideally there should be ongoing engagement with businesses to ensure that, as culture changes and the uptake of automation and effective data collection and use increases, the necessary skills courses and programmes are prepared and available in advance of demand.

Each council should designate one individual who is responsible for liaising between the council, CAFRE and the appropriate Labour Market Partnership to ensure that skills training and provision is in place in advance of widespread demand.

Costs

This cost of this programme is the largest of any of those made in the recommendations in this report. Delivery of the above actions require a combination of dedicated personnel, assistance from support organisations and the implementation of specialist commercial support. We estimate that the costs are as follows.

1) Provision of a resource which is fully dedicated to the creation and maintenance of communication databases, record keeping around uptake of training and support. Estimated cost: £44,000 per council area. Please note that this cost is shared with Recommendation 1.

2) Provision of support staff to provide assistance and cover during absences: £15,000 per council area. Please note that this cost is shared with Recommendation 1.

3) Provision of resources to identify case studies, site visits, technology. We suggest that this becomes the function of existing business support team within the council, with one employee specifically designated to this task for a proportion of their employment. This is a repurposing of an existing cost, but will cost £20,000 annually per council area.

4) Provision of facilities, meeting places, travel budget and facilitation for meetings and events: £55,000

5) Provision of staff time to ensure that skills training is coordinated between the Council, CAFRE and the local Labour Market Partnership: £8,000 annually.

6) Delivery of communication and marketing: This cost is covered under Recommendation 2.

If costs are apportioned to a specific programme, the following tables outline estimated budgets for delivery of this programme to 200 and 300 businesses respectfully.

Table 1: Budget for delivery to 200 businesses annually

Budget for 200 businesses per year			
	Days	**Rate**	**Cost**
Audit	2	550	£1,100
Mentoring	3	500	£1,500
Total x 200 businesses			£520,000
Development of a toolkit			£10,000
Information			
Templates			
Webinars			
Flyers			
Promotional info			
Quarterly Events			
Speakers	2 x £250	500	
room hire		200	
Refreshment	30 people x 15	450	
Recording and editing		400	
		1550	
4 per year			£6,200
Series of short webinars			
6 x £500			£3,000
Total			£539,200
Project Mana	10%		£53,920
Total Cost per year			**£593,120**

Table 2: Budget for delivery to 300 businesses annually

Budget for 300 businesses per year			
	Days	**Rate**	**Cost**
Audit	2	550	£1,100
Mentoring	3	500	£1,500
Total x 300 businesses			£780,000
Development of a toolkit			£10,000
Information			
Templates			
Webinars			
Flyers			
Promotional info			
Quarterly Events			
Speakers 2 x £250		500	
room hire		200	
Refreshme 30 people x 15		450	
Recording and editing		400	
		1550	
4 per year			£6,200
Series of short webinars			
6 x £500			£3,000
Total			£799,200
Project Ma 10%			£79,920
Total Cost per year			**£879,120**

It should be noted that we have included these costs under Recommendation 3, but the same programme can deliver under Recommendations 6 and 7 as well.

- Recommendation 3. Programme which supports food businesses to collect data and implement automation, business improvement processes

- Recommendation 6. Encourage culture change in agriculture and agri-food businesses, the importance of KPI's, data, improvement setting, continuous improvement

- Recommendation 7. Provide advice and support to enable businesses to improve their market sustainability

Possible Collaboration Partners
The following organisations have been identified as potential collaborators for delivery of Recommendation 3:
- Invest NI
- FE colleges
- External training providers
- CAFRE
- UFU
- QUB/UU

Recommendation 4: Create an aesthetically appealing environment for business

Reasoning

Northern Ireland food business is dependent on export. The majority of NI food exports are marketed in Great Britain, and a high proportion of this is purchased by multiple retailers. The space is highly competitive and successful businesses leverage a range of attributes to develop and maintain ongoing sales relationships. Buyers from multiple retailers are responsible for purchase from many businesses and regularly visit. Consequently the setting and environment of these businesses is important, and well maintained and presented surroundings are important.

Feedback from several businesses across the region identified the need for well maintained and presented surroundings around customer facing businesses. Multiple businesses stated that the appearance of an area can impact the willingness of customers to visit and also affect their perception of the business. The value of the output of this recommendation is very difficult to estimate because there is not a direct cause/effect relationship between the appearance of an area and the sales of companies based in this area. However, direct feedback from a number of businesses indicated the importance of a tidy and picturesque surroundings. This includes the absence of rubbish, well maintained roads as well as visual enhancements.

Action: 1 Deliver a study to map surroundings of key export businesses

Deliver a study to describe the environment and surroundings for all main food businesses in their area which are servicing important national and international clients. In conjunction with a landscape gardener or landscape architect, amendments should be designed which improve the visual environment around each business.

Action 2: Examine the findings from the mapping study and address the highest priorities

The councils should examine the study findings and cost each of the recommendations.

Costs

We estimate that the cost of this study will be between £15,000 and £25,000 per council area, not taking into account the remedial action which will be required after the study. Costing the remedial actions is difficult because the additional cost is highly dependent on the findings for each area.

Possible Collaboration Partners

The following organisation has been identified as potential collaborators for delivery of Recommendation 4:

- NI Executive

Recommendation 5: Create space and services to accelerate food business growth

8.1.1 Create areas with pre-approved planning for food units

Reasoning

Feedback from several businesses across the regions highlighted a significant lack of areas in most council areas which have pre-approved planning permission available for businesses to build premises. The study of business growth across Northern Ireland over the past 4 decades shows that businesses tend to grow where land and facilities are available. Multiple businesses identified the need for land with pre-approved planning permission for food units and noted that the availability of these is reducing. The need was deemed urgent by many.

Action 1: identify, purchase and approve sites which enable the rapid building of Food Facilities

Each council should identify, purchase and approve sites which enable the rapid building of Food Facilities. Each council must plan and create space for development for the next 20-30 years. It is very hard across a short study to identify very long-term needs for development space, but it is reasonable to assume a 10% development rate per year. This suggests that the following development requirements are needed:

1) The ability to enable the placement of 70 additional food facilities of varying size.

2) This will require approximately 2-300 acres of development space per council region, across approximately 10 locations in each borough.

3) Planning should be pre-approved, and services should be immediately joined to these areas

Costs

This is a challenging recommendation and the costs of the programme cannot be fully determined without additional work. However, estimated costs can be derived. At current prices, land which is able to be zoned for planning permission for the council will retail at between £20,000 and £30,000 per acre. 200 acres of land will require an investment of around £6 million, plus a further estimate of £1 million to ensure that appropriate services are connected.

However, provided that the land comes with appropriate planning permission, it can be sold to businesses who wish to build on it, meaning that the cost of the programme is much lower, ideally with the outlay and associated costs being recouped when the land is transferred to new ownership.

8.1.2 Ensure that services which enable food businesses to be built are readily available

In addition to the provision of sites with pre-approved planning permission, the sites must actually be suitable for food production. This means that a number of services must in place to maximise the speed with which a premises can be established and operational. These services include:

1) **Water supply.** Several businesses identified NI Water as a blocker to expansion and financial development. Often a site can be found and planning permission obtained, but NI Water are unable to connect the site within an appropriate time period (0-3 months).

2) **Waste treatment facilities.** Food businesses are often associated with relatively high levels of waste. As a result, any sites which are to be used for food production must have access to methods of waste disposal. These facilities must be minimal.

3) **Electricity supply.** Electricity must be available, but is rarely a blocker to this type of development.

4) **Ultra-fast broadband.** While slightly less important than water or waste treatment facilities to rapid establishment of processing units, broadband is nevertheless crucial to future development. As robotization and automation increases in food production facilities, the need for remote support (and

occasionally remote control or the use of imaging technology/vision tech), will increase. This cannot be effectively delivered without very high broadband speeds, particularly around an industrial park where there may in the future be many thousands of pieces of technology relying on reliable, high-speed internet access.

Action 1: Identify current gaps in service provision and lobby/network to address shortcomings
Council should establish a programme to interact with a range of businesses to understand the areas in which they believe services are limiting their business. Council should establish an engagement programme with all key service providers to lobby for immediate upgrading of facilities.

Costs
The cost of this action is relatively low as the connection of services is the responsibility of different departments or businesses.
- Approximately 4 full weeks will be required for a council resource to contact each key business and discuss service provision with them at a cost of approximately £4000.
- A budget for staff time, travel and interaction/lobbying should also be set, with around £8,000 annually being allowed for this.

8.1.3 Ensure that pre-prepared incubation or nesting food units are available

Throughout the research and discussions carried out, it became clear that there is a need for pre-prepared food facilities to available for businesses to use immediately. These facilities are not just for startups or small businesses. Several medium to large businesses highlighted their own need for additional facilities for one of two main reasons
1) The ability to start a spin-off business
2) The ability to test and develop new equipment

Incubation units were also identified as important facilities to enable the start-up of new food businesses. Multiple businesses identified their inability to locate new food grade facilities and emphasised that this was a hindrance to existing businesses. This is even more the case with small start-ups, and discussions with incubation centres/food hubs reinforced the 'build it and they will come' message.

Costs
This is a highly complex recommendation and should not be implemented without further study. We are aware that a study for two additional incubation centres/food hubs has started and this recommendation should be considered in the light of the information in that report.

8.1.4 Ensure that the planning approval process is simple and defined

Introduction
During the study, we requested examples of good council practice which businesses would want to have within their own areas. The most commonly identified component was 'good planning'. Several businesses expressed frustration at the planning process. Several reasons for this were highlighted;

- **The lack of defined timescales between submission of a planning application and the approval or rejection of it.** This was highlighted as bad practice. Councils in England are able to give an exact date by which a decision will be reached, allowing businesses to plan effectively.

- **Lack of awareness by planning staff of the need for rapid approval of business applications.** Multiple businesses identified a difference in pace between council planning activity and business need. Planning was highlighted as a restricting factor for business development.

It should be noted however, that not all businesses complained about the planning process. Some were complimentary and had received good service from their planning department, so the picture is not all bad. It is simply that there are a range of factors (specific experts, clear understanding of the issues around establishment of agriculture and food facilities, defined timescales for response etc.) which could significantly improve the overall experience while safely accelerating economic development.

- **Implement a guaranteed timescale for consideration and approval/rejection of the planning application.** This system should mirror the process identified in England.

Action 2

- **Create a specific, rapid business planning approval process which recognises the importance of business expansion and development and enables very rapid consideration of planning applications**, with a process for modification and resubmission of plans if the initial approval is rejected. We suggest that this process involves the designation of specific staff to business approvals, allowing them to build an expertise in food business planning, so that applications are considered rapidly by those with specific knowledge. This will allow business planning to be rapid without planners missing potential dangers which are specific to the food industry.

Action 3

- **Ensure local planners should are aware of key development needs in agriculture and agri-food, as well as the key challenge points and solutions which are likely to arise.** Discussion with businesses revealed that some planning offices were knowledgeable about the industry whereas others were not. The council should ensure that all planning officers are highly knowledgeable about the sector and are able to assist in the development of appropriate facilities which meet relevant planning law.

Action 4

- **Local planning strategies must include provision for the development of food businesses**, and should attempt to place appropriate businesses beside each other to enable cross-fertilisation, sharing of business and exchange of information.

Costs

The costs to deliver the actions above are relatively minimal with, with the main focus being on internal communication, training and awareness. Some budget may need to be set aside for training, travel and internal communication. The training may be required to enable specific individuals to understand the latest emerging technology and facilities which will be required to service agriculture and the food industry. This would include facilities such as central slurry processing, hydrogen fuel storage, vertical farms etc.

We estimate that each council should allow a budget of £10,000 annually for travel, training events and internal dissemination.

Possible Collaboration Partners

The following organisations have been identified as potential collaborators for delivery of Recommendation 5:

- NI Executive
- Invest NI
- CAFRE
- FE colleges
- Funding Bodies

Recommendation 6: Intentionally focus on supporting the delivery of culture change in agriculture and agri-food business

Information for this report was gathered from a range of sources, including previous surveys, and it was clear that within the food industry there is a culture of 'get the job done', with a focus on metrics around production rather than profitability or margin. Whilst this often leads to high customer satisfaction, it can come at the expense of long-term profitability and business sustainability.

There is a need to change the culture around business activity in Northern Ireland to recognise and celebrate the factors which drive high business performance. In particular this demands that businesses collect data, analyse data and implement well directed continuous improvement programmes.

Culture change cannot be delivered overnight, instead requiring the intentional, ongoing delivery of messages which encourage change.

Current Culture
- Businesses using some KPIs, but these are not fully thought through and comprehensive
- Businesses are not collecting the ideal amount of appropriate data
- Businesses not analysing the data fully or using it effectively for management
- Businesses have not fully established their baseline performance and have not fully set the correct improvement targets
- Businesses have not implemented a culture of continuous improvement
- Businesses not investing or not investing correctly in tools, equipment and skills training to deliver ongoing process improvement.
- Businesses not investing in consumer research to understand consumer perception of their product(s) and how it could be improved.

Intended Culture
- Businesses identifying the most important KPIs for their business
- Businesses collecting appropriate data, analysing it and using it for management
- Businesses establishing baseline performance and setting improvement targets
- Businesses implementing a culture of continuous improvement
- Businesses investing in tools, equipment and skills training to deliver ongoing process improvement.
- Businesses investing in consumer research to understand consumer perception of their product(s) and how it could be improved.

Action 1: Create a communication and event plan to actively change business culture
We recommend that the councils agree the key business culture attitudes which require change, what they should be changed to, and then create a communication and event plan which is specifically designed to effect change.

The communication and event plan should contain;
1) Contact details for key support organisations and individuals
2) Case studies of high performing businesses
3) Clear explanations of the potential business benefits which can be obtained through continuous improvement processes
4) A breakdown of the individual components of change
   - Effective data collection
   - Effective data analysis
   - Application of data analysis to identify high, medium and low performance
5) Examples of process change in response to data analysis
6) A series of 5 events annually which are designed to change culture

- Event 1: Components of continuous improvement
- Event 2: 'Meet the expert' event
- Event 3: Meet the business event, with businesses demonstrating how they have solved data collection and continuous improvement
- Event 4: Factory visit event
- Event 5: Discussional event where participating businesses each present two business challenges they have, and the group jointly discusses and develops solutions

7) Planned release of material which encourages culture change against a timetable
   - Creation of a database of businesses which will receive the culture change information
   - Calendar created which determines material which will be released monthly
   - Identification and creation of material which is to be released according to the calendar
   - Material to include web-based, social media and video production
   - Material creation and sourcing be delivered against the agreed communication calendar

8) Creation of a single point of contact for businesses to coordinate involvement in events and to enable networking between businesses.

9) Creation of a small group of 'Mentor Companies' who are willing to offer assistance to other businesses who want to improve who are also willing to share information and mentor other businesses.

Action 2: Deliver the communication and event plan to actively change business culture

Councils should appoint either external or internal resource to deliver against the communication and event plan.

Costs

The costs of recommendation 6 are broken down into four main areas;

1) **Costs around the creation of a database of agriculture and agri-business contacts** with which correspondence will take place on a regular basis. These costs are already included in previous recommendations.

2) **Costs to produce the material which will be communicated**. This is an ongoing cost and is likely to utilise about four months per year of council employee time at a cost of around £16,000 annually.

3) **Costs for ongoing specialist communications support**. External support may be required to generate the communication plan and to deliver against it. Estimated costs for ongoing support are £650 per month, or £7,800 annually.

4) **Event costs**. Delivery of the events will require venues, food and on some occasions, paid consultancy. We estimate the cost at around £2000 per event, with a total of £10,000 annually

Possible Collaboration Partners

The following organisations have been identified as potential collaborators for delivery of Recommendation 6:
- DAERA
- Department for Economy
- External consultants

Recommendation 7: Provide advice and support to enable businesses to improve and market sustainability

Sustainability is the most significant challenge facing food production today. Evidence shows (Poore and Nemechek 2018) that apparently similar food production chains, producing identical food can have wildly varying environmental impacts, with some chains having up to 50 times the impact of higher performing food chains. In public surveys, 28%[20] of respondents stated that they believe that buying sustainable brands could make a difference.

Local is a big factor in this, with produce considered more sustainable due to less miles travelled and perceived better quality. Throughout the interview process, it was evident to the team that there is a sustainability story which can be told throughout the four areas involved in the study, with businesses either being unaware or unable to make the claims through lack of understanding or the relevant understanding of the data to back it up.

If both Council and business can work together to tell the environmental story in the area, it should grow a bigger market for their products while helping local business to play a role fighting the climate crisis. In order to tell an environmental story, first we need to understand the story we have to tell. To do this within the Advertising Standards Authority (ASA) rules (outlined below), data must be collected so that the claims are both robust and scientifically accurate.

8.1.5 Establish a baseline for sustainability performance on farm and in business

Agriculture is likely to improve its current performance once it can measure current improvement, implement changes, and measure the result. The primary challenge here is around the creation of a culture of data collection and use, and this is considered in Recommendation 6. However, if a culture of measurement is to be implemented, it cannot stop at attitude change and needs to be translated into action. Effective knowledge exchange is key to this, as is a knowledge of the appropriate technology and practice to apply.

A knowledge of best measurement practice, and the standards to which the measurement will take place, must underpin this. The main organisation responsible for change is CAFRE, and the bulk of farm based knowledge delivery lies with them. However, council can facilitate Knowledge Exchange events and can contact multiple businesses to engage them in the understanding and implementation of best practice.

Action 1: Councils to engage with CAFRE to raise the number of Knowledge Exchange events and demonstrations in each region
We recommend that councils engage with CAFRE to raise the number of Knowledge Exchange events and demonstrations in each region. We suggest that a minimum of 5 such events are held and facilitated annually in each region.

Costs
We estimate that a cost of around £1000 per event (including promotion), plus 2 weeks of council employee time per event.

8.1.6 Engage with organisations that are able to develop sustainability in Agriculture & Agri-Food Businesses

Within Government and especially within the Agriculture and Agri-Food sectors, organisations are working to develop sustainability, and this is gathering pace. Within CAFRE there are several departments which council can engage with, including the Sustainable Land Management Branch and most importantly for Agriculture, the Environmental Business Development Groups. AFBI and Queen's University, Belfast are also heavily engaged, as are

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[20] Source: Kokoro: The Score

commercial organisations such as Devenish and Fane Valley. There is also the development of the 'Northern Ireland Diamond'[21] which council should engage with the development with to ensure a voice.

Action 1: Each council designates a point-person to liaise with all organisations which are seeking to develop and market sustainability within agriculture and agri-food.

We recommend that each council designates a point-person to liaise with all organisations which are seeking to develop and market sustainability within agriculture and agri-food. This individual's remit will be to develop relationships and engage in the joint planning of events to transfer knowledge and encourage the uptake of sustainable practice. We recommend that engagement takes place with organisations which are working in agriculture and in agri-food.

Costs

As this won't be a full time role, Council should consider making it part of a current business development staff members remit.

8.1.7 Encourage culture change around high environmental performance and business performance going hand-in-hand

There is the perception that to achieve high environmental performance, you must sacrifice business performance. In fact, some of the easiest ways to make improvements such as using energy more effectively and reducing waste by going paperless actually save businesses money.

This can be achieved both by ongoing engagement from existing council business development officers, engagements with Food Networks where they exist as well as utilising the database established in Recommendation 1 to educate businesses.

8.1.8 Upskill business advisors to be able to deliver effective advice around sustainability

In order to provide the most relevant advice, Council business advisors must be able to provide up-to-date, effective advice around sustainability to those they advise. As this is an area where recommendations are changing through new understanding of science, this will need to be part of an ongoing development plan.

Action 1 and Costs: A fund of at least £10,000 a year be set aside to send business advisors on relevant courses

We recommend that a fund of at least £10,000 a year be set aside to send advisors on relevant courses, as well as to bring in outside expertise where needed to ensure business advisors have the knowledge they need.

8.1.9 Create a network of contact points that put businesses in contact with organisations that can provide assistance

As with recommendation 2, although there are many routes to help it can be difficult for businesses to access a comprehensive list of exactly what organisations that can be approached, and exactly the type of help can be accessed. Because of the recommended upskilling in 8.7.4, the business development team will be best placed within Council to identify these organisations and should be tasked with this work.

8.1.10 Provide information and training on how to use environmental and sustainability claims to promote business

In 2021, the Advertising Standards Authority (ASA) released a stringent set of rules which businesses must take into account when making environmental clams, which includes sustainability. These range from ensuring environmental claims are clear, understandable and based on science.

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[21] Peter Kendall - Independent Strategic Review of the Northern Ireland Agri-Food Sector.

To this end, Council should liaise with experts in the field to provide a series of ongoing courses provided through both Council and food networks to enable businesses in the area to make sustainability claims on their products.

Possible Collaboration Partners
The following organisations have been identified as potential collaborators for delivery of Recommendation 7:
- Invest NI
- FE colleges
- External training providers
- CAFRE
- UFU

Recommendation 8: Create events and networks which promote local food production and attract visitors

Reasoning
Our experience of food network delivery across the country has shown that multiple benefits can result from focused activity to encourage visitor traffic. However, success demands cohesive planning which takes a range of factors into account. Any food event or network must benefit all those who are involved, and town centre events must benefit local shops as well as stallholders.

8.1.11   Food Producer Fairs, Markets and Showcases, Restaurant Fairs and Showcases

Introduction
There are multiple food fairs, markets and events across the UK and Ireland which demonstrate and sell food products from local food producers. The experience of other council areas (Wicklow, Boyne Valley, Cork etc.) shows that a focus on local food and local food producers, and the creation of networks and events usually pays dividends in terms of visitor traffic, local interest in local food and joined up supply between local food producers and local restaurants.

Farmers markets are continuing to gain in popularity, and those which have a good range of high class food products can attract high levels of visitor traffic. Some markets are static, remaining at the same location on an ongoing basis, but other markets can move locations to two or three regular venues.

Action 1: Councils in this study agree a joint specialist food producer promotional strategy
We recommend that the councils in this study agree a joint specialist food producer promotional strategy and event plan for key towns in their own regions. These should be focused on three main aspects:

1) **The creation of events/forums which enable specialist producers to introduce consumers to their products**

2) **The creation of events/forums which enable specialist producers and larger producers to present their products** to potential larger scale purchasers

3) **The creation of events which celebrate food production**, raise awareness of the sector and create interest in careers in the food industry.

We recommend that the council initially holds three events per year, one of each of the above suggestions.

Action 2: councils in this study agree a joint restaurant/hotel promotional strategy and event plan for their own regions

We recommend that the councils in this study agree a joint restaurant/hotel promotional strategy and event plan for their own regions. These should be focused on the creation of events/forums which enable restaurants to introduce consumers to their types of food and to promote footfall through their premises.

1) **The creation of events which enable restaurants to introduce local consumers to their food**, encouraging them to visit the actual restaurant and to encourage others to come as well.

2) **The creation of events which celebrate food service**, raising awareness of businesses in the sector and increasing visitor traffic.

Action 3: Identify existing markets, frequency and location and produce a GAP analysis to establish the need (if any) for additional market provision

There are a range of well-established markets in the areas of study which provide a good route to market for both fledgling and well-established products. These markets can be hard to find online, although are well known locally. During the course of this study we could only find four, two of which are located in Causeway, Coast & Glens and the others in Mid Ulster and ABC.

Causeway Coast & Glens

The Causeway Speciality Market (2nd Saturday of the Month, 9am-4pm)
Causeway Speciality Market (Second Saturday of the month)

Mid Ulster

Tyrone Farmers Market (1st and 3rd Saturday of the Month, 8:30am – 12:30pm

Armagh City, Banbridge & Craigavon

Elmfield Market, Gilford. Markets are held every second Saturday of each month in the Elmfield Courtyards 10am-3pm.

Although 2 of the 4 of these markets aren't run by Council, they have an impact on the local economy and therefore should receive Council support. We recommend a scoping study to examine the exact impact of the existing markets and the potential uptake if they were to be established in Fermanagh & Omagh.

Costs

The costs for these actions are as follows:

1) **Generating and agreeing a specialist food producer promotional strategy and a restaurant/hotel promotional strategy.** We estimate the need for 8 weeks of time for a council employee (£8000), plus external support at £5000 to develop the plan.

2) **Holding events and forums.** The overall figure for this section is highly dependent on the specific events held, the size of the events and the location at which the events are held. However, we estimate a cash cost of £5000 per event (including promotion), plus 2 weeks of council employee time per event (at £2000 per event) giving a total cost of £21,000 annually.

3) **The costs of a proposed scoping study to understand the impact and need of farmers markets**. This study would be conducted by an outside, specialist consultancy following a tendering process and would cost £15,000

8.1.12　Food Awards

Action 1: Create awards to champion food production and food places

We recommend the creation of a marketing, awards and publicity plan for food in the local area. Interest in food is growing and a number of organisations are helping to drive this, but there is, overall a lack of coordinated effort which recognises the contribution of food businesses to the economy, the environment and society in general.

Traditionally Council run awards can be costly, leading to deficits in already tight budgets. In our experience running these types of events in conjunction with different partners such as Newspapers as Media partners can go a large way to mitigate the cost especially as providers in the different areas already have extensive knowledge of running this type of event, such as the Omagh Business Awards run by Omagh Chamber of Commerce in conjunction with Ulster Herald.

8.1.13　Develop regional food networks where none currently exist

Introduction

As can be seen from the highly successful, and ever growing independently run 'Taste Causeway' food network centered around the Causeway Coast and Glens Borough and the 'Food Heartland' in Armagh City, Banbridge and Craigavon Borough which is run by Council there is an ever growing need for local Food Networks to facilitate a collaborative growth to marketing, communications and business growth.

These networks especially help smaller food businesses to access peer-to-peer support, access a broader market for their products, and have the ability to communicate to more customers than if they were doing it themselves. In some cases, such as 'Wicklow Naturally' the network can also be established as a quality mark enabling businesses to use it on their products to both promote the network while letting educated consumers know that it's a quality product. In some cases, this can also be applied to restaurant menus, encouraging local chefs to use local, quality produce in exchange for use of the brand.

As noted above, there are networks already established in two of the Council areas. If this were to be done within both Mid-Ulster and Fermanagh and Omagh District Council it would create a bigger market for their products.

Action 1: Examine the potential for development of food networks within the boroughs in the study

We recommend that the council fully document the food networks, discussion groups and collaborations which are operational in their areas. Our figures indicate that approximately 35% of businesses are in some sort of network or group, and documentation of these is the next logical step.

Action 2: Produce a GAP analysis which identifies regions and topics which are not covered by current provision

Following identification and documentation of the groups and networks, the council should deliver an analysis of each of the groups, identifying the overall purpose of each group, its focus, the topics discussed, and its current membership.

Action 3: Identify areas where council can help or facilitate

Following analysis of each of the groups, assessment should take place of delivery against agreed council priorities, including data collection, analysis and use for management, automation & robotization, continuous improvement (focusing on raising productivity and sustainability) and effectively communicating the business story.

Costs

Initially a scoping study would need to be commissioned at a cost of around £20,000 for each area to allow engagement with local businesses into the viability and structures of a network and to develop a plan for setting up the network. Initial setup costs are likely to be the same as 8.1.8 (below) and annual costs will depend on the set-up and structure of any network created.

8.1.14   Join up food networks and development groups

Businesses working together, sharing information and utilising join promotional opportunities has been proven again and again to help drive business. One of the things mentioned in the interviews was the need for a more regional food network so that businesses, especially those who regularly travel to farmers markets around the country, have an easier route into a larger market for their products.

With the correct funding in place, there are excellent opportunities for Taste Causeway, Food Heartland and Lough Neagh Artisans along with other businesses to join together for two or three larger events every year which would be something beyond their ability as single entities. This would need delivered in several steps

Action 1: Create conditions which enable groups to work jointly and encourage organisations to join
For any group like this to be a success - although Council driven - it requires considerable buy-in from the Stakeholders it is there to serve. Therefore careful recruitment of members needs to take place, ensuring a balance between the council areas as well as between different business types. A good core stakeholder group will go a long way to driving the success of the regional network. We estimate the cost of this action to be around £5000 annually for each council.

Action 2: Create and facilitate sessions
Once the group is formed, sessions will need to be held to facilitate the structures and functions of the group in a way that works for its members. This may be a group run from inside Council, independently by its stakeholders, or somewhere in between. To develop the network the core stakeholder group will need to go through a journey to look at all the options, agree on structures and positions within the network as well as brand, events and promotion. We estimate the cost of this action to be around £33,000 annually for each council.

Action 3: Deliver branding and design services
Agreed as part of the Facilitation Sessions, the group will need strong branding to better enable its promotional vehicle to be effective. This will require the services of a competent design/marketing agency to talk through ideas with the group and produce the final branding. We estimate the cost of this action to be around £10,000 annually for each council.

Action 4: Enable the creation of a bespoke Website & Social Media
Once branding is agreed, the group will need a bespoke website an social media presence to aid with promotion and presence. Decisions will be made during the facilitation sessions on the exact type of website needed, but once decided a web developer will have to be engaged to do the work. We estimate the cost of this action to be around £6000 annually for each council.

Action 5: Enable Reporting & Administration
As with any project such as this, the company engaged to do the work will need to report back regularly to the funders. We estimate the cost of this action to be around £5000 annually for each council.

Costs
The total estimated cost of the overall programme is £49,000

8.1.15   Enable businesses to use opportunities arising from showcase events

During our discussions with business, we found that many identified a lack of ability to 'tell the story' of their business in order to effectively market their business to potential purchasers.

Councils are able provide support to 'animate' businesses to build their capacity to maximise and take advantage of the opportunities arising from showcasing events. This could take the form of pre-market preparation both in terms of one-to-one mentoring on how to present their business, develop their image/ethos/message and also some support with branding, purchasing promotional merchandise etc

The provision of training for businesses around how to present and market themselves can have a significant effect on business success. Usually small businesses start with a production focus, and those running the business tend to understand this aspect of business better than the sales and marketing component. This means that the potential sales of the business are much lower than they potentially could be. Like any other component of business, sales and marketing techniques can be learnt and the provision of local courses for local businesses can accelerate the uptake of proven techniques and improve the sales performance of these businesses.

This training would be delivered through virtual and physical meetings and would use sales and marketing experts to break down each aspect of communicating, marketing and selling the attributes of the business and business output. Mentoring could also be provided for selected businesses to walk them through the ideal process.

Costs

The delivery of sales and marketing training could be included as part of the larger overall development programme outlined under Recommendation 3, but as a stand-alone, we suggest the following

1) 4 courses for 10 businesses each at £6000 per course (including consultancy, venues and material)
2) One to one mentoring for 10 selected businesses (2 days per business) £15,000

Possible Collaboration Partners

The following organisation has been identified as potential collaborators for delivery of Recommendation 8:

- Tourism NI

Recommendation 9: Engage with the Assembly on the delivery of the 10X Agri-Tech Cluster
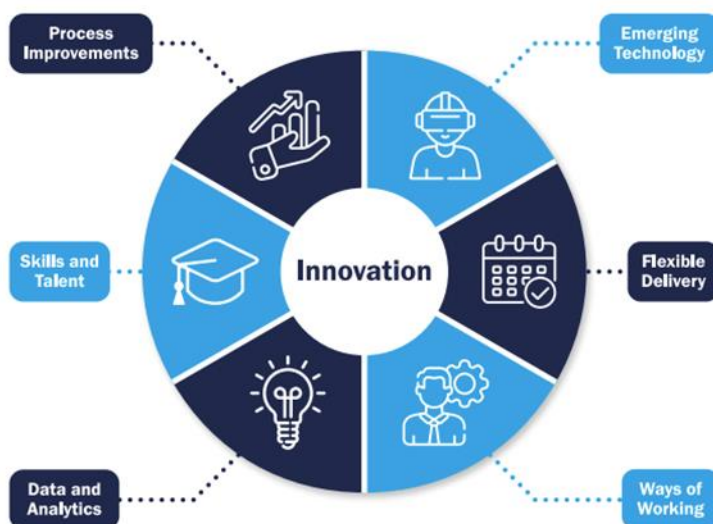
According to the Department for the Economy's 'A 10x Economy' report

"Northern Ireland has a large agriculture industry that is successfully evolving to meet changing customer demands and there is high potential to apply innovation and technologies such as Artificial Intelligence to this industry. With the NI food and drink sector growing by 7% in 2018 to over £5 billion, agri-food remains a key catalyst for other

sectors of the economy. We need to build on opportunities such as demand for locally sourced, organic foods, and understand how applying innovative technologies to this sector can lead to advancements and position businesses to meet the demands of the future. We have leading edge research facilities in this area, such as the Institute for Global Food Security, which, through collaboration with our strong food manufacturing sector, can provide opportunities for companies to develop new products and processes. It is estimated that the demand for new workers in agri-food could grow by 1,000 annually, with up to 10,000 new workers required in the next decade.

5.5.   The technologies that will shape the future from Northern Ireland are:
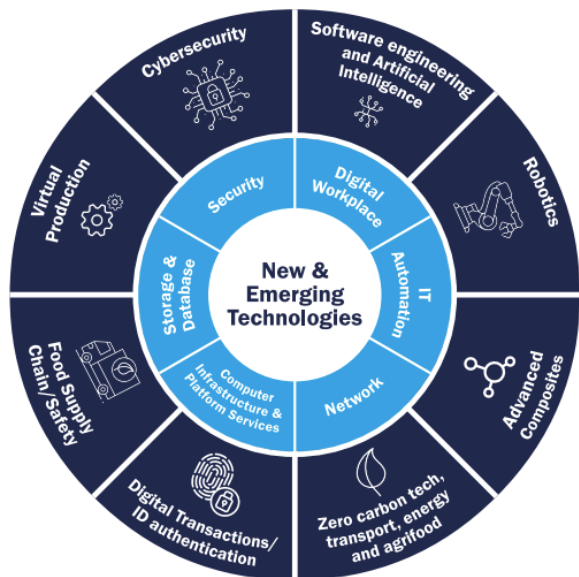
"The development of key strategic clusters is widely acknowledged as an important driver of competitiveness in economies around the world. Internationally orientated firms are frequently embedded in deep clusters with highly integrated supply chains. Other small, advanced economies with successful clusters include Switzerland (finance, pharma, precision engineering), the Netherlands (logistics, food), Denmark (shipping, renewable energy, pharma), Israel (high tech) and Hong Kong (finance, logistics)."[22]

Councils can play a role in the development of the 10X Agri-Tech Cluster applying innovation and enabling technologies to build competitive advantage across primary and secondary processing sectors including geometrics, traceability of food, advanced packaging, plant and animal health specialists and the application of A1 to the new agricultural methods.

There is a need for Culture Change within Council approaches from being broadly risk averse, to being prepared to take risks to enable development. Innovation isn't ever guaranteed to succeed and ambitious projects need a chance to either flourish or flounder in order for some others to thrive. Failure is not terminal, it is part of progress.

The prevailing culture can mean that tried and tested methods are maintained - often well after changes should have been made - with innovation being restricted and seen as a cost rather than an investment.

Innovation needs a practical focus, with a need for networks or consortiums to identify specific challenges which can be tackled through innovation.

We recommend the following actions:

Action 1
- Councils to engage with assembly and gov departments which are seeking to develop the agri-tech clusters

Action 2
- Councils to make available information on the most urgent needs in the agri-tech sector e.g. measuring performance, automating process, delivering quality control, improving health and safety

Action 3
- Identify local businesses which are willing to engage with the customer (business) which will include agri-food and agri-tech businesses

Action 4
- If required, provide space and facilities to enable development and demonstration of agri-tech

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[22] Department for the Economy "A 10X Economy"

- If required provide events such as farm walks or factory tours or workshop events which will demonstrate good practice in agri-tech

Action 6
- Council to use communication databases established in earlier recommendations to promote agri-tech development and to assist to engage commercial companies in the network

Action 7
- Council should consider establishing an investment fund to invest as a silent partner into agri-tech companies

Costs

There are several different costs to be considered under this recommendation, which include Council staff time, the costs of running an event and use of an external resource to determine data.

Council staff will need to be involved engaging the assembly and government departments, providing information on the most urgent needs and facilitating meetings that enable development.

Events will cost around £1,000 each to run, with communications to stakeholders and any advertising also included.

An **external resource** will be needed to help determine businesses that are willing to engage, and to help understand the most urgent needs in the sector, which would cost £20,000.

If Council considers establishing an **investment fund**, a minimum of £50,000 per year would need to be set aside, along with a stringent application process and a small team to administer it (£50,000). Ideally, this would generate income, and we would recommend a scoping study (£20,000) before any action was taken.

Possible Collaboration Partners

The following organisation has been identified as potential collaborators for delivery of Recommendation 9:
- NI Executive

9 Summary of Evidence and Reasoning behind the Recommendations

Recommendation	Evidence and Reasoning
Recommendation 1: Create comprehensive, effective communication and record keeping within each council region	Investigation of the level of communication from council to farms and agri-food businesses revealed that there were very low levels of direct communication which occurred. The main reason for this was identified as the lack of a comprehensive and accurate database of businesses, key contacts and contact details for businesses in each area. The ability to communicate directly with farms and agri-businesses is crucial to effective delivery of council involvement in industry development.
Recommendation 2: Ensure Joined up working between the council, Invest NI and other connected organisations	Investigation of the support available to businesses revealed the following: 1) It is very difficult to rapidly understand the range of support which is available to businesses 2) There is very little information either gathered or available to indicate the uptake of business support. Either it doesn't exist, too little data is recorded, or the information recorded cannot be given out due to data privacy regulations The need for council, support organisations and business to work together to target, identify and encourage take up of support is critical. A number of organisations and businesses interviewed for this report identified the need for an official and regular forum in which relevant support organisations can share information and better target and deliver support. Even within Council, the need for Officers with an extensive understanding of the Agri-Food Industry was identified as a need to help businesses receive a better level of support.
Recommendation 3: Create a programme which supports all food businesses to collect and use data and to implement automation	Business survey data collected during this report showed that over half of all businesses were dissatisfied with the amount of data their business collects. In reality (and from direct experience with other projects), there are very few businesses which collect enough data and manage effectively against it. Business in Northern Ireland does not have a culture of effective use of data and Invest NI indicate that business productivity in NI is around 18% lower than comparable businesses in GB or ROI. There are a number of reasons for this, but two stand out: The previously easy access to inexpensive labour, and the subsequent underinvestment in automation and robotisation to improve labour productivity.
Recommendation 4: Create anaesthetically appealing environment for business	Multiple businesses highlighted the need to operate within environments which are as attractive as they can possibly be. They noted that surroundings have an impact on the willingness of large customers to purchase.
Recommendation 5: Create space and services to accelerate food business growth	80% of businesses in the survey we carried out indicated their intention to expand over the next 3-5 years. Discussions with many businesses revealed that they were already tight on production space and that expansion of facilities is necessary. Research into the availability of food facilities in Northern Ireland drew an almost

	complete blank, and this was confirmed through interview with a range of businesses. Council has a role to play in enabling the creation of incubation space, as well as building land which has permissions to enable the rapid construction of food production space.
Recommendation 6: Intentionally focus on the delivery of culture change in agriculture and agri-food business	This recommendation is based on verbal and observed information on currently accepted behaviour in food businesses in Northern Ireland. As described in more detail in the main report, businesses tend to focus on production numbers rather than driving productivity, efficiency and sustainability through the collection and use of data. Businesses must be encouraged to value the right things.
Recommendation 7: Provide advice and support to enable businesses to improve and market sustainability	This recommendation is based on the clear need to improve the sustainability of production. Over 70% of businesses in the target regions are actively involved in sustainability improvement, but the majority are only dealing with components of sustainability (for instance only 27-36% of businesses are involved in energy optimisation activity, reuse of co or by-products and reduction of material inputs), showing that there is very large potential to improve business sustainability in the target regions. In addition it is difficult for businesses to market sustainability because of the lack of measurement and independent audit.
Recommendation 8: Create events and networks which promote local food production and attract visitors	Approximately 35% of businesses in the studied areas are involved in development networks. This is surprisingly high, but encouraging. However, this means that 65% of businesses are not actively engaging in groups which can help to develop and promote their businesses. Food networks have become increasingly influential in Ireland, with producers banding together to carry out joint promotional work which raise sales and attract visitors to the area.`
Recommendation 9: Engage with the Assembly on the delivery of the 10X Agri-Tech Cluster	30% of businesses stated that they are having difficulty recruiting general staff, and 40% reported difficulty in obtaining staff with the relevant skills and qualifications. Labour supply is anticipated to become an ongoing challenge to the NI Food Industry, and consequently automation and robotisation is now vital. In addition to this, over half of businesses identified that they were not collecting the ideal amount of data to optimise management of their business. The time commitment and the lack of automatic data collection and analysis were given as two main reasons for this and the implementation of advanced equipment and software can deliver solutions in this area.

10 Links in this document to key high level strategies

Recommendation	Links to Key Strategies
Recommendation 1: Create comprehensive, effective communication and record keeping within each council region	All strategies are linked to this recommendation on the basis that if the council wants to encourage development against NI's core requirements, effective communication with agriculture and agri-business is critically important.
Recommendation 2: Ensure Joined up working between the council, Invest NI and other connected organisations	**Kendall: Create a Northern Ireland Diamond to deliver green growth.** The Northern Ireland diamond was described as a framework for effective engagement between the industry, government, science and civil society. It is intended to facilitate joint target setting and work towards key goals, allowing the Northern Ireland food industry to become world leading for integrity, environmental assurance, quality and customer service. The report highlighted the fact that Northern Ireland has a closely connected food network, strong institutions and the ability to lead the world in many areas if the industry can harness its connectedness. **Green Growth: Collaborate** - work and learn together to develop solutions that maximise the outcomes we want to see 10X: Skills development. The changing demands of the agriculture and food sectors will mean that competence with advanced technology will become increasingly important. As a result, joined up working between organisations providing skills development and knowledge exchange is vital to enable the maximum number of businesses to be fully prepared for future needs.
Recommendation 3: Create a programme which supports all food businesses to collect and use data and to implement automation	**Kendall: Embrace the smart use of data and the opportunities it creates.** The Kendall report identified the absence of data collection, analysis and use for management as the key driver of change up and down the supply chain. **Kendall: Tackle skills and labour supply.** The report engaged with many businesses throughout Northern Ireland, up and down the supply chain. What was clear was that many businesses are currently dependent on a ready supply of labour, and there is currently a severe threat to this supply. Businesses identified the need to automate, but emphasised that, in many cases, automation is too difficult to achieve with the variable nature of the product that is being processed. **Kendall: Entice entrepreneurship and talent.** The need for entrepreneurs was highlighted within the industry, and this recommendation focused on the need for the industry to work together to encourage talent into the industry, to encourage risk-taking and to take the industry forward. Scientific and commercial innovation is seen as key within this. **NIFDA: Challenges around collection of data to measure business performance**, including automation of data collection, installation of software systems which can communicate effectively, the analysis of the data and regular reporting to management to enable better decision making. **NIFDA: Challenges around attracting and retaining labour,** particularly for unskilled repetitive jobs which do not add value to the final product. Almost all businesses expressed concern around obtaining labour and expressed the desire to find methods

of automating much of the manual work. The main area most businesses would consider for automation is packaging and storage.

NIFDA: Challenges around upskilling staff to meet the needs of a much more technologically advanced production floor. Many of the businesses identified challenge around upskilling staff to enable management of an advanced production floor. The future of food production is generally recognised to be one where there are fewer people in more highly skilled and better paid roles. Significant training needs are starting to emerge.

10X Agri-Tech will attempt to drive the application of innovation and enabling technologies to build competitive advantage and transition to net zero across the primary and secondary processing sectors, including genomics, traceability of food, advanced packaging, plant and animal health specialisms, and the application of Artificial Intelligence to new agricultural methods.

Recommendation 4: Create anaesthetically appealing environment for business	N/A
Recommendation 5: Create space and services to accelerate food business growth	**10X Agri-Tech** will require additional space and facilities for companies to test and implement new technology. Several companies highlighted the challenge of obtaining enough space to test equipment before full installation, as well as difficulties in obtaining space to carry out R&D.
Recommendation 6: Intentionally focus on the delivery of culture change in agriculture and agri-food business	**NIFDA: Implementation of continuous improvement principles.** All businesses in the report were focused on implementing improvement. Not all businesses felt that this approach was shared by all staff, including some at management level. Continuous improvement requires cultural change, and is heavily linked to the data collection and use component. **Green Growth: Lead by example** - inspire ambition, innovation and courage for change. Show the way by being honest, open and transparent in measuring our progress
Recommendation 7: Provide advice and support to enable businesses to improve and market sustainability	**Kendall: Demonstrate the sector's sustainability through a new Sustainability Body.** The report recommended the creation of a cross sectoral sustainability body, where each sector would carry out joint development work, as well as individual sector work to address jointly set targets. **Kendall: Be ambitious on Net Zero.** The report emphasised the urgency of the industry setting ambitious targets for itself and demonstrating decisive action to the consumer. The need for businesses to measure sustainability performance, set targets and demonstrate improvement is important. **Kendall: Aim high on your environmental scorecard.** A range of initiatives were suggested under this recommendation, aimed at creating joint working up and down the supply chain to meet the required targets. Part of this recommendation was centred on key messaging and culture change across the supply chain. **Green Growth: Decarbonise** - replace fossil fuels with renewable energy

	Green Growth: Reduce our wasteful use of resources - through greater efficiency and an increasingly diverse and circular economy
Recommendation 8: Create events and networks which promote local food production and attract visitors	Marketing of local business and promotion of local food intertwines with the ongoing focus on business development, as well as the development of Tourism in Northern Ireland.
Recommendation 9: Engage with the Assembly on the delivery of the 10X Agri-Tech Cluster	**10X Agri-Tech** will require partnership with the councils, support organisations and local businesses.

11 Timescales for recommended actions

Recommendation	Actions	S/M/L Short:0-6 months Medium: 6-24 months Long: 24 months +
Recommendation 1: Create comprehensive, effective communication and record keeping within each council region	Action 1: Maintain a fully up to date communication database	Short
	Action 2: Maintain records of uptake of support	Short
	Action 3: Work together cross-departmentally and with local and national support organisations and, if appropriate, other councils, to signpost and deliver targeted business support in each region	Short to Medium
	Action 4: Create a highly focused rolling communication plan which guides council interaction with business	Short
Recommendation 2: Ensure Joined up working between the council, Invest NI and other joined up organisations	Action 1: Where not already in place, each council to designate a specific role or partial role to facilitate joint working between key organisations and business	Medium
	Action 2: Where not already in place, each council to create a business development forum which enables the council to engage with other relevant support agencies to ensure that businesses are receiving all the support they require	Short
Recommendation 3: Create a programme which supports all food businesses to collect and use data and to implement automation	Action 1: Create a focused business training programme to accelerate the collection and use of data for management. This programme should include non-exporting as well as exporting businesses	Medium
	Action 2: Intentionally focus on a culture of business improvement	Medium-Long
	Action 3: Create a programme which supports all appropriate food businesses to implement automation. This programme should include non-exporting as well as exporting businesses	Medium
	Action 4: Councils to engage with CAFRE to ensure that there is collaborative working with Labour Market Partnerships to ensure that the skills agenda is met	Medium
Recommendation 4: Create a pleasant environment for business	Action: 1 Deliver a study to map surroundings of key export businesses	Medium
	Action 2: Examine the findings from the mapping study and address the highest priorities	Medium
Recommendation 5: Create space and services to accelerate food business growth	Action 1: identify, purchase and approve sites which enable the rapid building of Food Facilities	Medium-Long
Recommendation 6: Intentionally focus on the delivery of culture change in agriculture and agri-food business	Action 1: Create a communication and event plan to actively change business culture	Medium
	Action 2: Deliver the communication and event plan to actively change business culture	Medium-Long

Recommendation 7: Provide advice and support to enable businesses to improve and market sustainability	Action 1: Councils to engage with CAFRE to raise the number of Knowledge Exchange events and demonstrations in each region	Short
	Action 1 and Costs: A fund of at least £10,000 a year be set aside to send business advisors on relevant courses	Medium
Recommendation 8: Create events and networks which promote local food production and attract visitors	**Food Producer Fairs, Markets and Showcases, Restaurant Fairs and Showcases** Action 1: Councils in this study agree a joint specialist food producer promotional strategy	Medium
	Action 2: councils in this study agree a joint restaurant/hotel promotional strategy and event plan for their own regions	Medium
	Action 3: Identify existing markets, frequency and location and produce a GAP analysis to establish the need (if any) for additional market provision	Short-Medium
	Food Awards Action 1: Create awards to champion food production and food places	Medium
	Develop regional food networks where none currently exist Action 1: Examine the potential for development of food networks within the boroughs in the study	Medium
	Action 2: Produce a GAP analysis which identifies regions and topics which are not covered by current provision	Medium
	Action 3: Identify areas where council can help or facilitate	Medium
	Join up food networks and development groups Action 1: Create conditions which enable groups to work jointly and encourage organisations to join Action 2: Create and facilitate sessions Action 3: Deliver branding and design services Action 4: Enable the creation of a bespoke Website & Social Media Action 5: Enable Reporting & Administration	
	Enable businesses to use opportunities arising from showcase events	

	Action 1: Design and deliver a programme to enable small and medium businesses to develop their image and market themselves effectively	
Recommendation 9: Engage with the Assembly on the delivery of the 10X Agri-Tech Cluster	Action 1: Councils to engage with assembly and gov departments which are seeking to develop the agri-tech clusters	Medium
	Action 2: Councils to make available information on the most urgent needs in the agri-tech sector e.g. measuring performance, automating process, delivering quality control, improving health and safety	Medium
	Action 3: Identify local businesses which are willing to engage with the customer (business) which will include agri-food and agri-tech businesses	Medium
	Action 4: If required, provide space and facilities to enable development and demonstration of agri-tech	Long
	Action 5: If required provide events such as farm walks or factory tours or workshop events which will demonstrate good practice in agri-tech	Short-Medium
	Action 6: Council to use communication databases established in earlier recommendations to promote agri-tech development and to assist to engage commercial companies in the network	Short
	Action 7: Council should consider establishing an investment fund to invest as a silent partner into agri-tech companies	Long